

Public Utilities

FORTNIGHTLY



January 21, 1943

OUR PUBLIC UTILITIES IN A FREE
ENTERPRISE SYSTEM

By Fergus J. McDiarmid

* *

Public Power and the War Cloak

By Herbert Corey

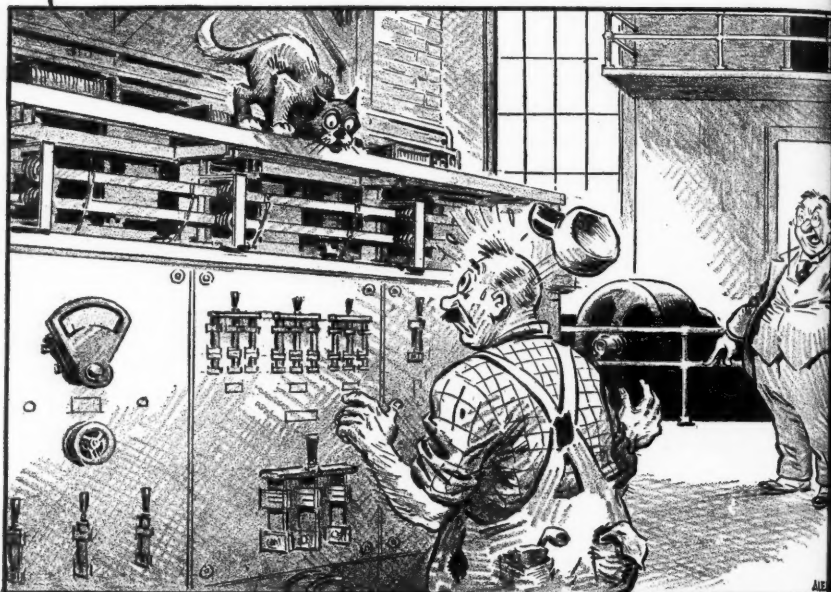
* *

The Base for Rate Regulation

By Lyle H. Olson



PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

"FROM HAPPENINGS LIKE THIS" ..



**"MAKE UP YOUR MIND, DINWIDDY!
IT'S EITHER YOU SHUT DOWN
THE PLANT OR THE CAT WILL!"**

In years of advocating enclosure for bus structures, I-T-E has been aided by recognition on the part of engineers in industry, of the hazards offered by open bus runs. No doubt, in plants now equipped with enclosed switchgear, there are engineers who will recall experiences of their own with open structures in which accidental outages occurred or were narrowly avoided.

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IMMERSED IN AIR  ENCASED IN STEEL 
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olders supplied
or your trade.
for new Catalog
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ersion and Ap-
Burners, and
tors.

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BARBER GAS PRESSURE REGULATORS

or Burners For Warm Air Furnaces, Steam and Hot Water Boilers and Gas Appliances

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Public Utilities Fortnightly



VOLUME XXXI

January 21, 1943

NUMBER 2

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Q This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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JAN. 21, 1943

When you cut pipe . . . Cut time and work too

with this
speedier

RIGGID Cutter



REASONS why RIGGID Cutters roll more quickly and easily through all kinds of pipe are in the design of the tools. The thin-blade wheel, for instance, coined from tool steel and assembled in steel-bushed hub, makes an unusually speedy clean cut. Heavy-duty cutter frames are warp-proof, always cut true, are nicely balanced for easy work. 6 sizes for pipe from 1/8" to 6". Also No. 42, 4-wheel short handle for cutting in close quarters. Ask your Supply House.



RIGGID Tubing Cutter, with rolls—also cuts thin wall conduit.

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*Fast-Working Tools for War.
and the Busy Peace That's Coming*



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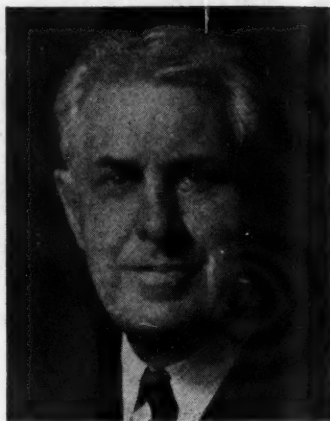


Pages with the Editors

LOOKING ahead to the post-war years seems to be quite the rage these days. Everyone who indulges in it takes care to issue assurances that such activity is not detracting one tiny bit from his concentration on the war effort.

WE all hope this is so and even if it is not we don't know what can be done about it, unless somebody can devise a sort of race horse barrier that will keep all the nimble minds marking time until the signal is given for everyone to get off to an even start. Admittedly, this will take some doing. Under the present circumstances, we have the spectacle of some left-wing planners insisting that private business concentrate on winning the war while they go ahead spinning fine theories of social consciousness for a Utopian world in years to come. The businessmen naturally dislike to see the adversaries of what we laughingly call the "profit system" getting away to such a head start. And so they are disposed to bone up a little on their own account.

UNLESS this rivalry is restrained it might result in too many firemen taking time off from fighting the world war blaze in order



LYLE H. OLSON

Value cannot be confined entirely to a hypothetical life table.

(SEE PAGE 90)



FERGUS J. MCDIARMID

Are serial bonds the answer to future utility finance?

(SEE PAGE 69)

to demonstrate how good they are at pitching horseshoes, or something. We still think the race track barrier for the nimble minds would be an ideal solution. But we are stuck right there; can't think up a single suggestion for going about devising one.

Of course, we must distinguish between active planning and simply taking sights in order to navigate one's course in the troubled years of reconstruction ahead. The real post-war planner is presumably somebody who either has the power or thinks in some way he will get the power to fashion some phase of our future way of life according to his own blue print. Needless to say, the woods are full of them—right, left, and center.

BUT the observers or, if you will, the forecasters are of a humbler breed who have no ambition to work their own will. They merely confine themselves to taking bearings for post-war navigation, as it were. They may go so far as to point out how certain rocks and shoals may be avoided and that brings them close to the planner's province. But by and large the observers are those who, as the theosophists used to say, "accept the universe."

The installation of Riley Pulverizers by these leading Public Utilities companies is indicative of their growing acceptance by the industry.

Pennsylvania Edison Co.—Williamsburg, Pa.
 Commonwealth & Southern Corp. for
 Southern Ind. Gas & Electric Co.—Evansville, Ind.
 Union Electric Co. of Ill.—Venice, Ill.
 Union Electric Co. of Ill.—Cahokia Station, Ill.
 Union Electric Co. of Mo.—Ashley St., St. Louis, Mo.
 Iowa-Illinois Gas & Electric Co.—Davenport, Ia.
 Potomac Electric Power Co.—Buzards Point, Md.
 Edison Elect. Illuminating Co.—Boston, Mass.
 Hartford Electric Light Co.—Hartford, Conn.
 Connecticut Power Co.—Stamford, Conn.
 United Illuminating Co.—Steele Point, Bridgeport, Conn.
 Interstate Power Co.—Dubuque, Iowa
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BOILERS - SUPERHEATERS - AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES
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OF such persuasion apparently is the author of our opening article on public utilities in a free enterprise system. He is FERGUS J. McDIARMID, security analyst for the Lincoln National Life Insurance Company of Fort Wayne, Indiana, and a frequent contributor to these pages.

THE article beginning page 82 by the well-known Washington author, HERBERT COREY, entitled "Public Power and the War Cloak," deals more with the troubled present than the troubled future. However, if the government's public power program makes as long advance during the war emergency as Mr. COREY says it threatens to do, there will probably be considerable trouble in the future for competitive private enterprise.

EVERY so often we have to go back to fundamentals and publish an article on the basis for rate regulation—just to hold our franchise as it were for being a magazine devoted primarily to the problems of utility regulation. In this issue we are glad of the opportunity to execute this function in a somewhat different manner. It is an article by LYLE H. OLSON, vice president of the American Appraisal Company, and chairman of the Association of Appraisal Executives. Mr. OLSON, an architect by training and an appraiser by profession, has been in the appraisal business for over forty years. He has engaged in these activities in most of the states of the United States and several countries of South America and Europe. Though he has written numerous articles for business and professional publications, this is his first appearance in the FORTNIGHTLY.



HERBERT COREY

There are a number of public power soldiers—marching as to war.

(SEE PAGE 82)

JAN. 21, 1943

WE have read with considerable wonder and no little perplexity the occasional hints thrown out of Washington that the Federal government might encourage a plan whereby the average citizen would be able to start paying now for a utility appliance, automobile, or other commodity which can no longer be purchased new, and be guaranteed some sort of a priority on post-war delivery. Since the production of most new utility appliances fell a fairly early victim to war effort conversion, this news must naturally strike a responsive cord in the breast of many a utility man who looks dismally at bare shelves in his merchandising department and sees the ghost of departed sales forces (now somewhere in New Guinea, perhaps, serving grenades to the Japs instead of vacuum cleaners to the Lady of the House).

If this scheme, which our contemporary, *The New Yorker*, has dubbed the "Show-Me-First-Your-Penny Plan," comes to pass it will certainly revolutionize the technique of salesmanship, credit collection, and so forth. Imagine the impact on the advertising business alone! Imagine being invited in multicolored displays to "Ask the man who's going to own one," or "Buy X vacuum—it's going to get every bit of dirt that is loose in a rug." There's a chance we may even witness credit letters which demand immediate payment of delinquent instalments under penalty of "repossessing your machine—as soon as it's manufactured."

AMONG the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

A RULE requiring gas customers to pay one cent per hundred cubic feet on delinquent bills was ordered by the Missouri commission to be modified to provide for a penalty of 5 per cent, and a rule requiring a deposit or guaranty of payment, not in conflict with the general order of the commission governing such matters, was approved. (See page 65.)

THE integration of certain public utility systems and the disposal of businesses not retainable under the Holding Company Act were ordered by the Securities and Exchange Commission, which discussed the retainability of additional holding company systems in the main system, the retention of other businesses, such as ice, steam, merchandising and jobbing, and the combination of gas and electric properties as part of a single integrated public utility system. (See page 68.)

THE next number of this magazine will be out February 4th.

The Editors



Management needs weapons that turn facts into action!

★"Fact-Power"—the visual organization of graphically recorded facts.

What factor is the key to the initial success that leads to final Victory?

We say, without reservation, "Fact-power!" With "Fact-power" America and its allies have moved forward with incredible speed because "Fact-power"—the visual organization of graphically recorded facts—is the weapon management uses to create, plan, order, build, produce and ship countless things to the United Nations forces on every front. "Fact-power" is the weapon that will continue to tell the United Nations the truth of *how much, how many and how soon.*

In countless instances in war plants all over the nation, Kardex Systems of Record Control have proven in action that they are a vital cog in our huge production wheel. Kardex shows the facts, speeds the decisions that spell defeat for the Axis. Kardex gets the kind of action the United Nations want by flashing the facts

on sight by the visible margin system with exclusive Graph-A-Matic signalling. Get the facts on Kardex now. Write to Remington Rand, Inc., Systems Division, Buffalo, N. Y., for sample forms and catalog on the new Wood Administrator Kardex line. No obligation whatever.

WOOD KARDEX

Remington Rand now produces Kardex in wood without changing in any way the signal and control features that have made Kardex world famous. And it's built for permanent use, too. No critical materials are used.



Kardex...the Production Expediter

by REMINGTON RAND INC.

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PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 65-128, from 46 PUR(NS)

4 YEARS
of
SERVICE
with
-no trouble
-no maintenance

VULCAN

SOOT BLOWERS

Last fall a check was made by Vulcan engineers on a soot-blower unit installed 4 years before in a twin furnace steam generator job at Oil City, Pa.

The engineers found that the unit had completed its 4th year of operation without one instance of servicing, repair, or maintenance having been required.

Because of the advance de-

sign of this boiler, involving new features in soot-blower design and construction, Vulcan engineers had inspected the installation regularly for many months. But the engineering was sound. No trouble of any sort developed. Operators reported perfect cleaning, reasonable cost — and VULCAN Soot Blowers were again specified on a duplicate steam generator installation!

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VULCAN
SOOT BLOWERS

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE



HERMAN C. LOEFFLER
Federal Budget Bureau.

"Local government after the war will be strengthened or weakened by its conduct during the war."

MAURY MAVERICK
Chief, Bureau of Government Requirements, War Production Board.

"You [municipal officers] must do what is necessary, regardless of whether your state Constitution or your attorney general says it is illegal."

EDITORIAL STATEMENT
Electrical World.

"Man can consume so much food, but unless man's inventive mind stops there can never be any limitation for long to his ability to consume electricity."

MAURICE H. GREENBERGER
New York attorney.

"Unless we can establish industrial and financial democracy, freedom of enterprise for the few will prove to be destructive of all the freedoms for the rest of us."

MARTIN T. BENNETT
Chief, gas supply section, power division, War Production Board.

"We may have to revise the [gas] industry's slogan, 'You can do it better with gas,' to a new slogan—'For the duration, you had better not do it with gas.'"

ALFRED M. COOPER
Writer.

"The city, district, or federally owned power bureau, controlling its own funds and handling its own accounting, is the most independent department of government in America."

ARCHIBALD MACLEISH
Director, Office of Facts and Figures.

"To have the masters of the American press silenced in front of you for twenty minutes while you tell them, is something any public servant would gladly sacrifice his hope of bureaucratic heaven to achieve."

GUY A. RICHARDSON
Director, ODT Division of Local Transport.

"We still today have an occasional war worker who cannot understand why his employee group should not be permitted to charter a bus to go on a picnic on a vacant lot or grove adjacent to a railroad station."

LEON HENDERSON
Chief, Office of Price Administration.

"This thing we call government, if it really is a democracy, is not apart from yourself. It is an instrumentality for getting the things done that you want done ... If you are scared of your government you will be scared of the post-war period."

IDEAS

... that are helping to solve
wartime accounting problems

IDEA

Obtain as a by-product of regular routines such vital reports as Labor Distribution by Accounts, Materials Used, Taxes Collected from Employees, War Bond Purchases by Employees.

IDEA

Combine or redesign forms so that related records—such as pay check, voucher, earnings record and payroll—can be posted together in one operation.

IDEA

Keep machines busy by relieving skilled operators of pre-listing, stuffing, heading accounts and other non-posting duties, and by scheduling relief operators for lunch hours, rest periods, etc.

IDEA

Make sure that operators are taking full advantage of figuring short-cuts, and that they are using all the time-saving features of their machines.

IDEA

Locate and eliminate causes of bottlenecks or idle machine minutes by rearranging machines, duties or the flow of work to the machines.

IDEA

Keep machines in the best possible condition through regular inspection, cleaning, lubrication and adjustment by Burroughs service men.

★ ★ ★

Burroughs' technical knowledge of machines, applications and procedures can be of great help to you in meeting today's accounting problems with your present equipment. Call your local Burroughs office, or write direct to—

BURROUGHS ADDING MACHINE COMPANY, DETROIT, MICH.

Burroughs

★ FOR VICTORY—BUY UNITED STATES WAR BONDS AND STAMPS ★

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REMARKABLE REMARKS—(Continued)

DONALD ARMSTRONG
Brigadier General, Chicago Ordnance District, U. S. Army.

"It's a matter of record that the performance of the electrical industry in America's war effort thus far is unsurpassed. This industry has been faced with colossal problems caused by the need for swift expansion of factories. Its response has been truly magnificent."

EDITORIAL STATEMENT
The Wall Street Journal.

"Bureaucracy piled layer on layer, the blaming of bureaucracy's mistakes on the innocent citizen, the regimentation of the citizen, the application of penalties, the withdrawal of ordinary protections—all are familiar signposts along the road whose end is totalitarianism."

CARL W. ACKERMAN
Dean, Columbia University.

"There are periods in a lifetime when it is more difficult to live for your country than it would be to risk your life for your country. You and I are living in such a time today. We must fight for our principles, our rights, and our convictions at home even if, in that fight, the opponent is our own government."

EDITORIAL STATEMENT
The New York Times.

"Before we attempt to impose compulsory labor we must get rid of the whole network of artificial restrictions that we have built up against voluntary labor. We must rid ourselves, in other words, of the innumerable devices for creating unnecessary jobs. We must end every useless political job in the Federal, state, or city bureaucracies."

B. C. FORBES
Editor, *Forbes*.

"Every employing concern is exhorted to save labor, to release a maximum of employees not absolutely necessary for war production. But what of the government itself? Major General Lewis B. Hershey, national Selective Service director, bluntly declares that 'too many' persons, upwards of 5,000,000, are employed by Federal, state, and local governments."

DAVID GINSBURG
General counsel, Office of Price Administration.

"... individual hardship cases cannot be allowed to absorb so much of the limited manpower of OPA as to impede the much larger job of designing and administering industry-wide regulations. The handling of three or four hardship cases absorbs as much administrative energy as the formulation of a much needed regulation applicable to an entire industry."

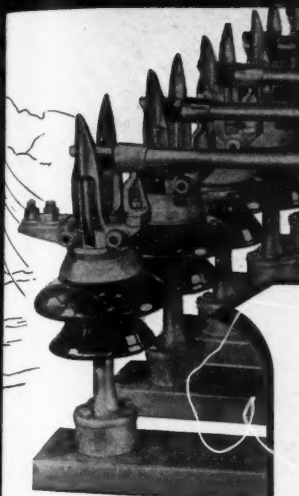
EDITORIAL STATEMENT
The Raleigh (N. C.) Times.

"Long outmoded now is the famous statement, rash as it was appropriate then, 'The Public Be Damned.' Brusque Commodore Vanderbilt, pioneer railroad builder of broad proportions, were he living now, would doubtless change his comment to something like, 'The Public Be Pleased.' Even private enterprise has learned, as have the utilities, that courtesy and satisfaction are productive of dividends."

R&IE

HI-PRESSURE CONTACT


Switching Equipment Feeding THE ARTERIES OF INDUSTRY



Now, when War Production makes prior claim to the manufacturer's output, is the time to seek quality and service as never before.

It's good business—Patriotic business—to demand the maximum service from available raw materials.

With your sympathetic cooperation in plans and specifications, R&IE can help more by thereby eliminating many of the occasional production delays.



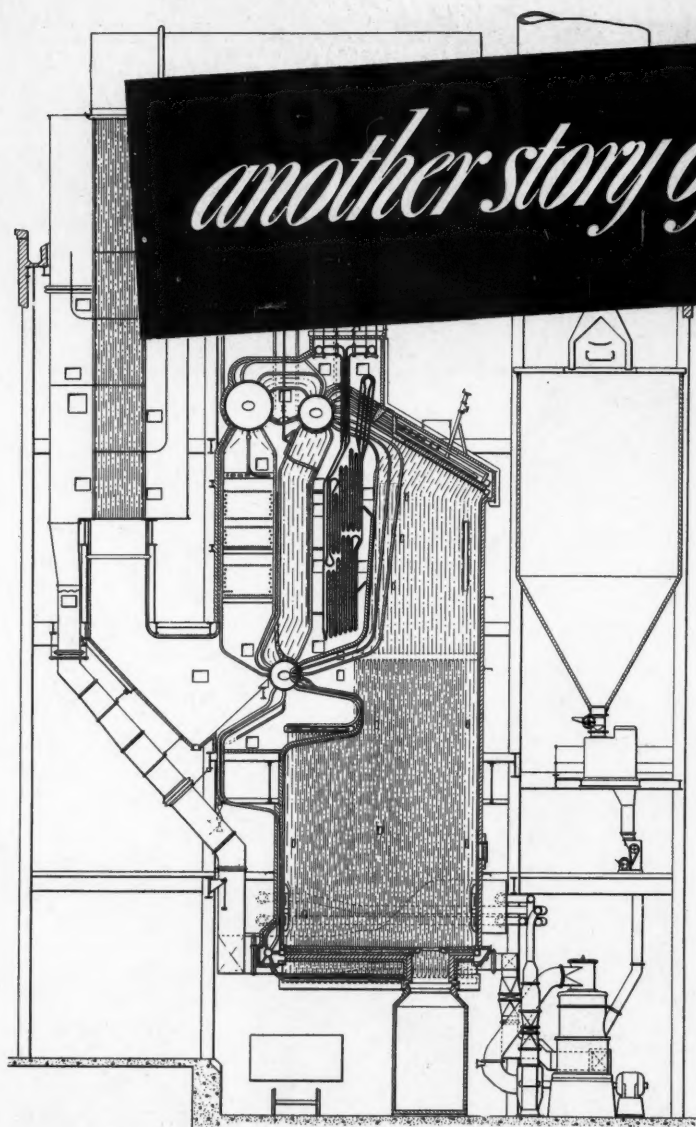
As you seek quality and Service, remember that R&IE has been a
SPECIALIST
for 31 years—in problems on Indoor and Outdoor SWITCHING EQUIPMENT.

ILWAY and INDUSTRIAL ENGINEERING COMPANY

GREENSBURG, PA. . . . In Canada—Eastern Power Devices Ltd., Toronto

Cooperating 100% with the War Effort

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The performance record described at the right was accomplished by two C-E Steam Generating Units of the type illustrated above. Maximum continuous capacity — 250,000 lb of steam per hr. Design pressure—775 psi. Total steam temperature— 910°F.

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STEAM AT WAR

Somewhere in the mid-west there's a new power station that serves an important area of a great industrial state. Its 50,000 kw turbo-generator is supplying the power on which depends the production of ordnance and munitions; machine tools and chemicals. It also provides electricity for important coal mining areas and even serves Army and Navy air bases and camps.

FORCED OUTAGE—1%

How dependably two modern C-E Units are supplying the steam for this turbo-generator is evidenced by data of recent performance covering a period of approximately 17 months. The forced outage time during this entire period for the two units combined was only 1% of all the available hours.

HIGH AVERAGE OUTPUT

During these 17 months, the average output for each

of the two units (rated at 250,000 lb maximum continuous capacity) was 224,000 lb of steam per hr.

BETTER THAN THE GUARANTEE

Furthermore, the combined overall efficiency of the two C-E Units was 88.74%—well above the original guaranteed performance.



Thus the evidence accumulates to show why this global war found our country prepared with more power capacity than all the nations of the Axis combined. The reason for this fortunate situation is the long established policy of the American public utilities which have consistently sought improved equipment in order to produce power more efficiently, more dependably and more abundantly. That's why power was among the readiest of America's implements of war.



COMBUSTION ENGINEERING

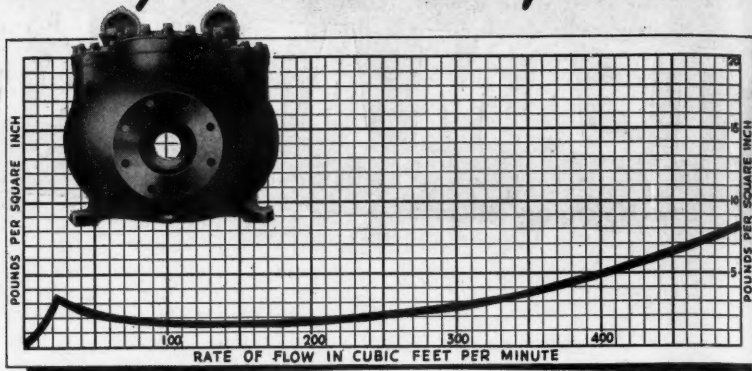
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WHERE *Pressure* IS AT A *Premium*



THE TRIDENT *Protectus* METER

NOTE CLEAR WATERWAY THROUGH METER

LOW LOSS of head and reliability are the keys to the approval of the Protectus Meter by the National Board of Fire Underwriters, Inc. These same features make this meter ideally suited for many other types of services where large volumes must be measured with minimum loss of head. An example of this is the increasing use of the Protectus for the metering of lines to large industrial housing projects beyond the anticipated limits of water distribution.

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KANSAS CITY, LOUISVILLE, ATLANTA, BOSTON.

Neptunus Meters, Ltd., 345 Blooraven Avenue, Toronto, Canada.

Approved

BY THE
UNDERWRITERS' LABORATORIES, INC.





RUSH ORDER...
FOR A TOUGH CUSTOMER
WHO ASKED FOR IT!

EVERY American-made shell stabbing through today's Axis landscape carries a promise . . . of plenty more coming . . . from an America now producing more than the enemy ever bargained for.

The thunder of our guns, daily more deafening to Berlin and Tokyo, voices the wartime industrial might of our factories and shipyards—turning mountains of raw materials into an endless and overwhelming flood of shells . . . ships . . . torpedoes . . . tanks . . . planes. In plants of all types

throughout America, Todd Combustion Equipment is contributing to efficient, trouble-free power-production . . . maintaining unsurpassed standards in the combustion of liquid and gaseous fuels.

With over 50 thousand units now in active industrial and commercial service, Todd technical staffs . . . with parts and replacements instantly available in key cities . . . are cooperating with plant engineers responsible for uninterrupted firing on the vital power-production front.

TODD COMBUSTION EQUIPMENT, INC.

(Division of Todd Shipyards Corporation)

601 West 26th Street, New York City



NEW YORK

MOBILE

NEW ORLEANS

GALVESTON

SEATTLE

BUENOS AIRES

LONDON

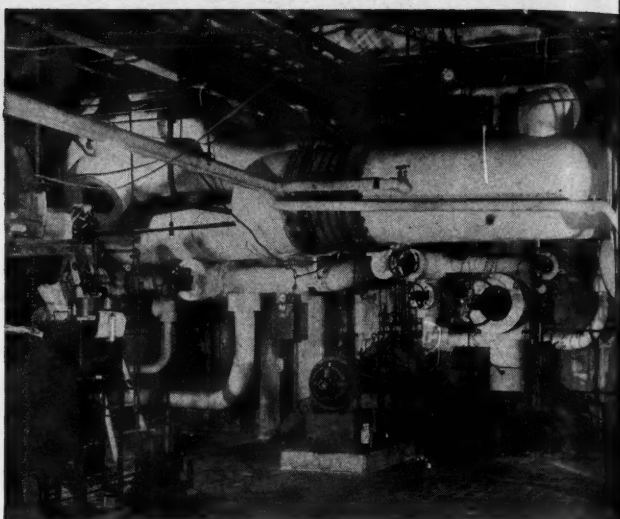


For Victory . . . Buy U. S. War Bonds and Stamps

DOES YOUR INSULATION INVESTMENT PAY A **FULL** RETURN?



ON FURNACES where insulation is required to resist temperatures up to 1900° F., J-M Superex is widely recognized as the most efficient block insulation available today. Hundreds of installations prove its long life and low maintenance.



FOR TEMPERATURES UP TO 600° F., you save by using J-M 85% Magnesia. For years the standard material for insulating power-plant equipment and steam lines, it combines light weight with permanently high insulating efficiency.

HOW MUCH MONEY you spend on fuel depends to a large extent on the answers to these two questions:

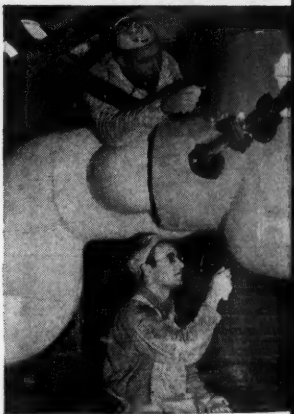
Are you using the correct insulating materials?

Are they applied in the correct thicknesses?

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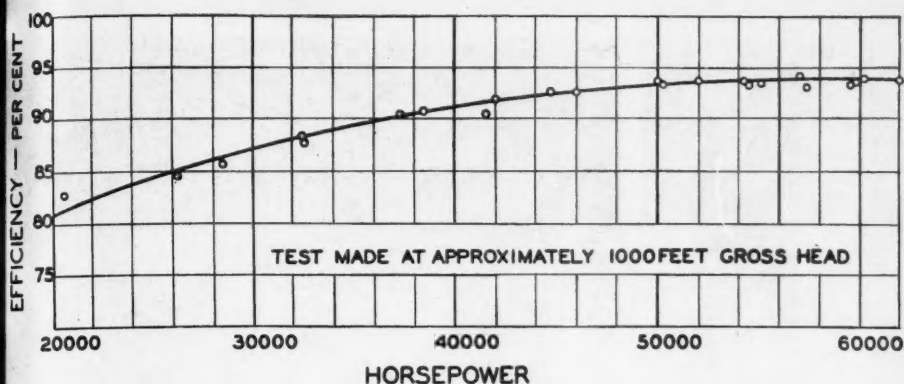
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January 1950
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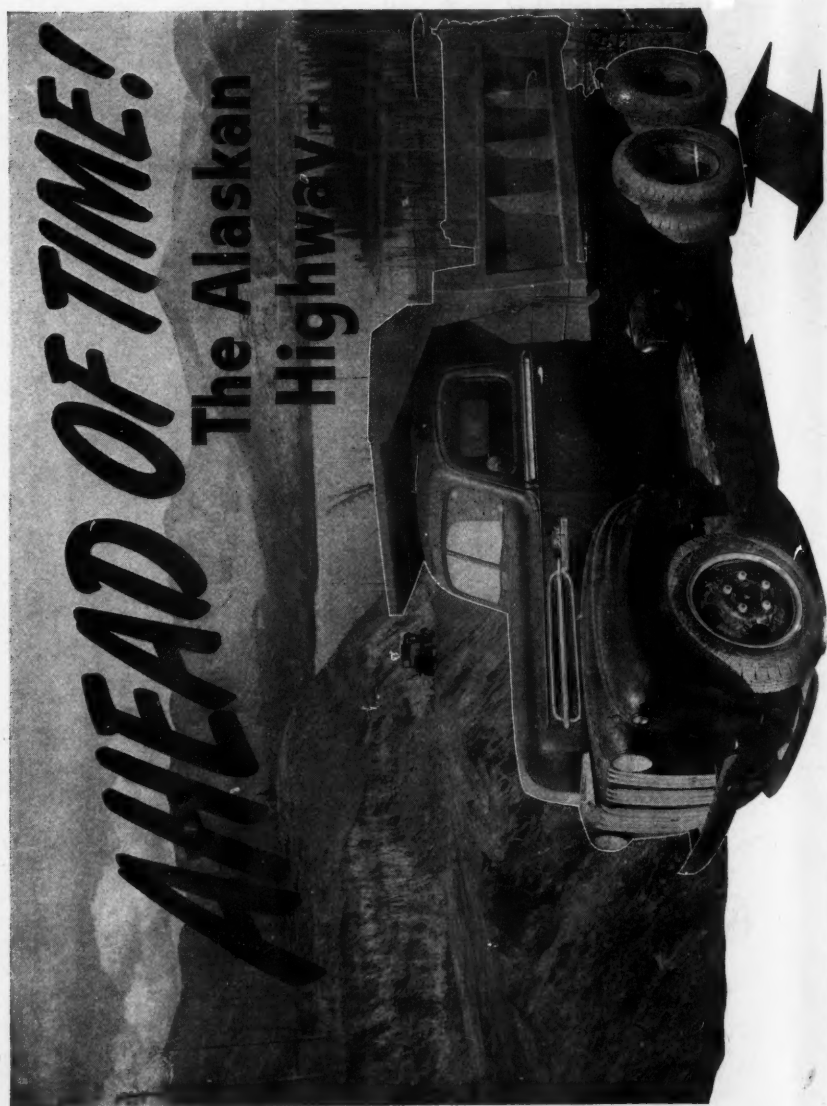


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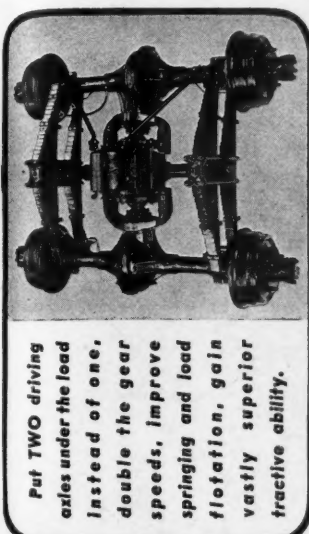
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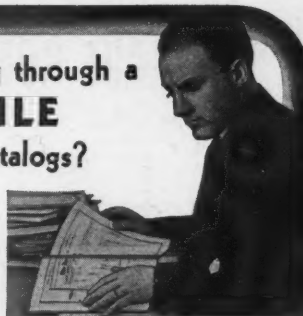
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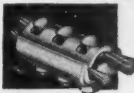
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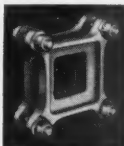
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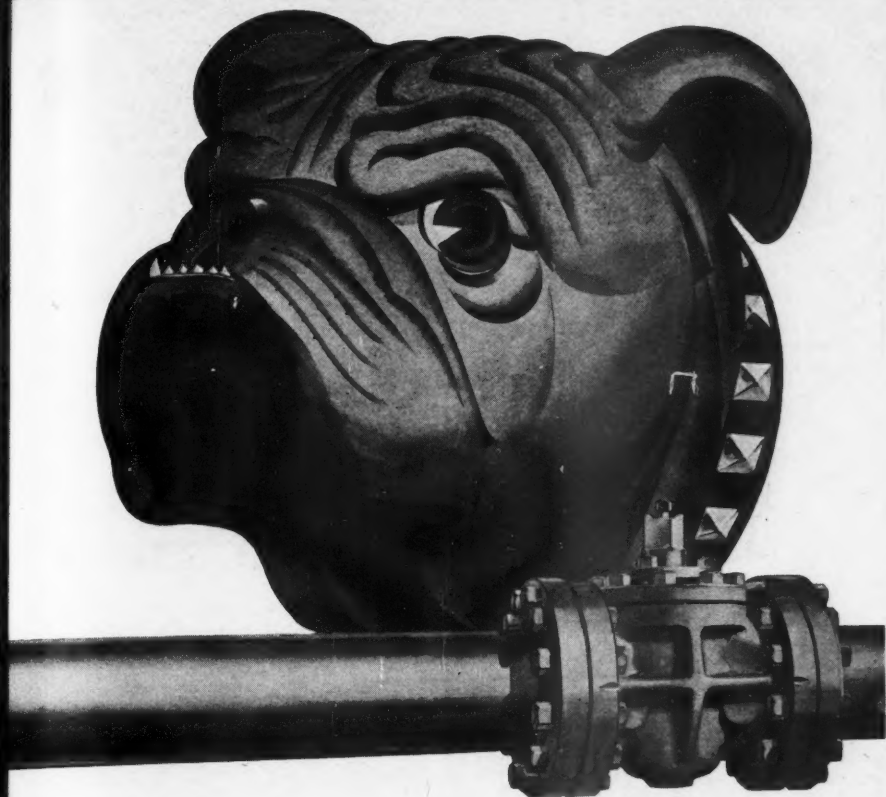


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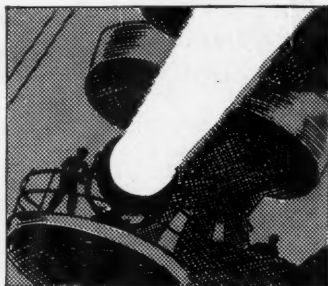
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On the Seven Seas

For 45 years General Electric has developed and built electric equipment for warships. Here are a few of the ways in which electricity serves the Navy.



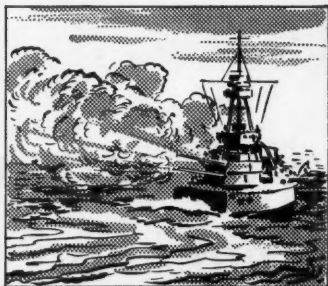
1. Just one battleship may have electric generators to produce as much as 180,000 kilowatts. This power would supply the needs of a city of 375,000.



2. Searchlights produce millions of candlepower of light to aid in detecting enemy ships and planes, and to guide Navy gunners to their targets.



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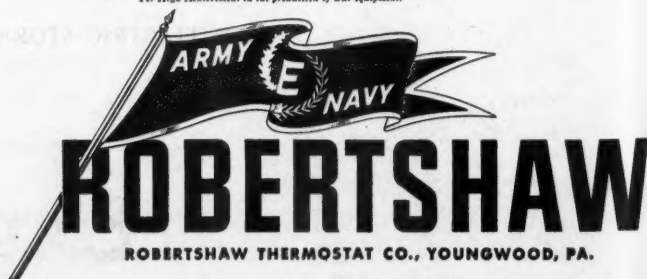


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Keep adding approved water at regular intervals. Most kinds of local water are safe in an Exide Battery. Ask us if yours is safe.

STEP No 2

Keep the top of the battery and battery container clean and dry at all times. This will assure maximum protection of the inner parts.

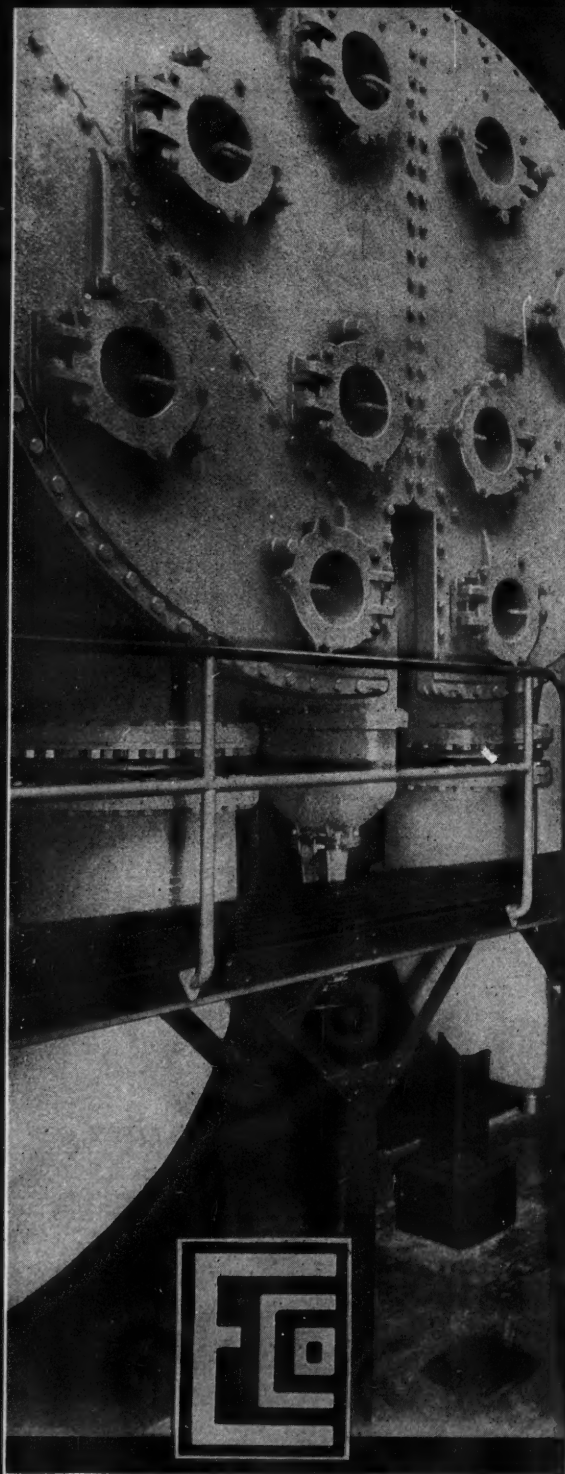
STEP No 3

Keep the battery fully charged—but avoid excessive overcharge. On batteries used for control service, check your D. C. control bus voltmeter to see that it is in calibration.

STEP No 4

Keep records of water additions, voltage, and gravity readings. Don't trust your memory. Write down a complete record of your battery's life history. Compare readings. Know what's happening.

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Utilities Almanack

Due to war-time travel restrictions, conventions listed are subject to cancellation.



JANUARY



21	T ^h	† Constructors Association of Western Pennsylvania will hold meeting, Pittsburgh, Pa., Feb. 4, 1943. ☺
22	F	† American Society of Civil Engineers ends meeting, New York, N. Y., 1943.
23	S ^a	† American Management Association will hold personnel conference, Chicago, Ill., Feb. 10-12, 1943.
24	S	† Conference on Highway Engineering will convene, Ann Arbor, Mich., Feb. 10-12, 1943.
25	M	† American Institute of Electrical Engineers opens winter convention, New York, N. Y., 1943.
26	T ^u	† Association of Highway Officials of North Atlantic States will hold highway problem conference New York, N. Y., Feb. 17-19, 1943.
27	W	† Texas Water Works Short School will be held, College Station, Tex., Feb., 1943.
28	T ^h	† Pennsylvania State Association of Boroughs will hold meeting, Feb., 1943.
29	F	† American Gas Association Industrial and Commercial Gas Conference will be held, Detroit, Mich., Mar. 11, 12, 1943.
30	S ^a	† American Water Works Association, Canadian Section, will hold convention, Hamilton, Ont., Canada, Apr. 7-9, 1943.
31	S	† Midwest Power Conference will be held, Chicago, Ill., Apr. 9, 10, 1943.



FEBRUARY



1	M	† Illinois Telephone Association will hold annual business meeting, Chicago, Ill., Apr. 20, 21, 1943.
2	T ^u	† United States Independent Telephone Association will hold executives' spring conference, Chicago, Ill., Apr. 22, 23, 1943.
3	W	† Missouri Association of Public Utilities will hold session, Excelsior Springs, Mo., Apr. 23, 24, 1943.



Courtesy, The Allied Artists of America

From Elsie Hafner, N. Y.

Landscape with Gas Tanks And Freight Cars

From a painting by
NATALIE ARRAS TEPPER

Public Utilities

FORTNIGHTLY

VOL. XXXI; No. 2



JANUARY 21, 1943

Our Public Utilities In a Free Enterprise System

Factors which make the survival of such a system possible considered by the author who says that the main criterion of the success of free enterprise in the future as in the past will be its ability to sustain reasonably full employment depending upon the free flow of savings into private industry, a matter in which the utilities and railroads will occupy a position of dominating importance.

By FERGUS J. McDIARMID

OUR public service industries in the past have formed a very important segment of our free enterprise system and their survival in anything resembling their present form is completely bound up with the future of that system. In case of a shift into some alternative type of economic arrangement, for example, some form of state capitalism or its *alter ego*, state socialism, the utilities would be among the first to feel the impact. It is, I believe, necessary to face the fact that

the free enterprise system of private capitalism as we have known it in the past now exists in but few parts of the world. In our own country where its roots had been very deep it has become increasingly inoperative as we have progressed into a war economy. In certain major countries where it had formerly played an important part, this system had passed out of existence before the present war, and in other countries, not excluding our own, it had been increasingly on the defensive.

PUBLIC UTILITIES FORTNIGHTLY

Will the free enterprise system be successfully and permanently revived after the present struggle in those parts of the world, including our own country, where it formerly held sway? Of one thing, I think, we can be certain; this system will not perish in America for lack of lip service to it. Also its fate will not be settled by the mouthings of demagogues or the conscious planning of bureaucrats. It will be decided by conditions favorable to its operation or otherwise. What were the conditions which formerly made for the successful operation of the free enterprise system? What set of factors has tended to undermine this system in recent years? What conditions will likely be necessary for its successful operation in the future? Finally, what part can our public service industries play to aid the successful working of this system of economy?

TO understand the present and appraise the future, one must know something of the past. And in the eyes of the historian our system of private capitalism is a comparatively modern thing, not over two centuries old. In historical sequence it is the successor of feudalism. It is first and foremost an Anglo-Saxon institution, having been first developed and attained its broadest and most general acceptance in the English-speaking countries. Its origin might be said to date from the beginning of large-scale industrial development in England in the eighteenth century. It has dominated the economic life of the American Republic during our entire history. Probably for this reason we have come to regard it as a universal system, permanent and unchangeable in its nature. The same at-

titude has existed, broadly speaking in the British dominions, with this difference—that due to a lack of local capital some large utility enterprises, including railroads, had to be developed under government guaranties. In the political sphere the free enterprise system has been paralleled by representative parliamentary government, usually through a 2-party system.

However, in very broad and important areas of the world what we have come to know as private free enterprise capitalism has never struck very deep roots. In Germany, for example, feudalism lingered long and large-scale industrialization did not take place till after the Franco-Prussian War of 1870. Thereafter development was swift, but since the country was short of capital resources, industry had to lean heavily on the banks and on the government. Indeed, large-scale German industry has been largely controlled and directed by a partnership of the banks and the military authorities, a fact which probably helps to account for the very great efficiency of that industry for war making. The German railway system was developed by the state as were many other public service enterprises.

IN Russia, even under the Czarist régime, free enterprise capitalism, as we know it, did not develop to any considerable extent. Feudalism lingered almost down to the present century. Many leading industries, including the railroads, were state monopolies, and the economic life of the country was pretty fully dominated by the state. Under the Soviet régime all semblance of private capitalism was wiped out. In Japan the feudalism which had long

OUR PUBLIC UTILITIES IN A FREE ENTERPRISE SYSTEM

prevailed in the political and economic spheres simply extended its sway over newly created industry. The façade of parliamentary democracy which formerly helped to fool outsiders regarding that country has now been largely torn down.

In France the free enterprise system achieved a sounder foothold than in these other countries. Nevertheless it did not achieve the prestige which it did in the English-speaking world. For one thing France's greatest relative power and prestige in the world was attained in an earlier period under a different system. For another, industrialization came rather slowly in France, and it did not attain the relative importance it did elsewhere. As late as 1848 the number of steam engines in use by French industry was only a small fraction of those in use in England in spite of the smaller population in the latter country.

Viewed in the light of history, it would seem that the free enterprise capitalistic system achieved its greatest and most unquestioned prestige in the period just prior to World War I. This was at the conclusion of a century of comparative peace and very great material progress which had been most striking in the English-speaking countries where this system had been given fullest play and had attained its maximum development. It is not sur-

prising, therefore, that at the end of that war the cry in both America and Britain was "back to normalcy" in order that the march of progress which had been interrupted by the war might be resumed. That "normalcy," meaning the conditions of the pre-1914 world, was not reattained was a source of widespread disappointment and disillusionment.

VIEWING the matter as objectively as possible it must be admitted that private enterprise capitalism declined sharply in public esteem in the period between the wars. In a number of important countries, including Germany, Italy, Japan, and Russia, it was very largely superseded by other types of economic systems in which the central governments played a dominant part. In France the old economic and political systems became sick unto death. In the Anglo-Saxon countries free enterprise continued to exist, but under increasing bureaucratic control and supervision, and without the almost universal and very enthusiastic popular support of the earlier period.

What may we expect in the period following World War II? For one thing, there is likely to be no great popular demand for a return to "normalcy," if by this is meant a return to the conditions of the 1930's. To too many people this would mean a return

“In the five years ending with 1941 new construction expenditures of the electric utility industry averaged \$618,000,000 annually. Such expenditures by the gas industry averaged \$91,000,000 annually in that period. The Bell system, representing about 80 per cent of the telephone industry, spent \$420,000,000 on new construction in 1941, and \$290,000,000 in 1940, a more normal year.”

PUBLIC UTILITIES FORTNIGHTLY

to large-scale unemployment. Also we are now being given a convincing demonstration of the enormous productivity of our industrial system when that system is encouraged to operate on an all-out basis. A great many people are now asking why similar productivity and resulting full employment cannot prevail in time of peace.

They are likely to be resentful of such curbs on potential productivity and employment as may be imposed in future through the operation of any economic system. For in the eyes of the masses, large-scale unemployment in the future is likely to prove a really intolerable thing. If a choice has to be made between a so-called free enterprise system accompanied by heavy, cyclical unemployment and some form of state capitalism which *promises* full employment there can be little doubt where the choice will rest. At the same time we will do well to bear in mind that, in economic matters, Americans are essentially a conservative people. The great majority of them would prefer no doubt to see free enterprise capitalism continue after the war *provided* private industry can do a satisfactory job of making employment.

CAN we now put our finger on some of the factors which have served to undermine the free enterprise system in the world? In the first place, we are now having a convincing demonstration that in modern total war or even in the preparation for such war really free private enterprise largely ceases to exist. Modern war demands pretty complete dominance by the central government of the economic life by the state. It requires the channeling of a very large part of the total na-

tional production to meet the needs of that government. A modern fortress economy and a free enterprise system are therefore mutually incompatible.

Looking back, we are now able to see that the century between Waterloo and the outbreak of World War I, in which the private enterprise system attained its greatest growth and most universal sway, was above all a century of relative peace. For the revival and continued health of this system anywhere in the world after this war, the reestablishment of some system of world security seems essential. Peace must be organized and enforced by those who have the power to do so. Very likely, in the world as it now exists, this will be beyond the strength or ambition of any single nation. Therefore, some workable system of collective security will have to be established if all talk about the future of the private enterprise system, even in America, is not destined to be quite without meaning.

ANOTHER set of circumstances which have served to undermine and discredit the free enterprise system has been the tendency of producer interest to combine and organize for the control of markets and prices. As one writer¹ has expressed it, the solution to our economic ills, the chief of which has been mass unemployment, has been sought from the point of view of the producer rather than that of the consumer, and the results have not been satisfactory. We are all familiar with the activities of the farm and labor blocs and as members of the great mass of consumers we increasingly fear and

¹ Edward Hallett Carr in his book—"Conditions of Peace."

OUR PUBLIC UTILITIES IN A FREE ENTERPRISE SYSTEM



Average Value of Electric Household Appliances

"In the years 1937 to 1941 the average value of electric household appliances manufactured annually was \$417,000,000 and this must be only a fraction of the total of subsidiary investment to which the utility industry gives rise. Indeed, one is struck with the thought that low and highly promotional electric rates can be a very powerful stimulant to the free enterprise system."

resent machinations of such economic pressure groups. And today we have the notorious silver scandal wherein a small group of producers use the machinery of government to hold the nation to ransom even at the expense of slowing down the war effort. We begin to feel that an economic system in which such producer interests play a dominant and harmful rôle is not a free enterprise system at all but a type of industrial feudalism for which as consumers we can hold little liking.

And while we are on the subject of organized producer interests which have tended to retard the operation of the free enterprise system, let us not fail to include certain labor unions. Their influence has been particularly felt in the building industry which should normally provide the greatest field for employment and investment in the country. It is, at least, in part due to restrictive and archaic regulations and methods enforced by union pressure which has kept modern and un-

subsidized housing beyond the reach of a large segment of our population. Compare this with the showing of the automobile industry where such influences have in the past been at a minimum. Obviously, if the free enterprise system is to make its best possible showing in future, such obstacles to its successful operation must be removed.

It was no coincidence that the period between World Wars I and II, which saw the free enterprise system deteriorate and disappear entirely in some parts of the world, also saw the rise, on an unprecedented scale, of tariffs, quotas, and other barriers to trade. Here again was an attempt to tackle economic problems solely from a producer point of view and with deplorable results. Many economists feel that this form of economic warfare had a good deal to do with paving the way for World War II. Some of the most industrious and highly developed peoples of the world live in thickly populated areas which are rela-

PUBLIC UTILITIES FORTNIGHTLY

tively deficient in raw materials. If these people are denied the opportunity to obtain these materials through the peaceful channels of trade, they may be expected to obtain them through violence or attempt to do so. Therefore, a world in which trade is throttled through barriers erected in the alleged interest of domestic producers cannot for long be a peaceful world. And a world at war or preparing for war is, as I have said before, not one in which free private enterprise can hope to operate.

ANOTHER prime requisite to the operation of a free enterprise system is a reasonably stable monetary system. In order that people may be willing to save and invest (without which such a system cannot function) they must have reasonable assurance that the currency units which they currently put aside will bear a reasonable relationship in purchasing power to those which they hope to receive later on. We may note that the period of greatest prosperity of free enterprise occurred in a period when the principal commercial countries of the world had reasonably stable currencies. After those currencies were wrecked by severe inflation the free enterprise system did not long survive. The debasement of a currency normally results in the ruination of the middle class. And there is no historical precedent for a system of free enterprise existing without a large and healthy middle class to support it. The two have always gone together.

Let us therefore take note of this fact in our war financing. Just now we are not doing any too well in this regard. Soon, according to present indi-

cations, our government may be raising about half of its revenue requirements by the selling of bonds to banks which is as inflationary as the printing of greenbacks. If as a result of the continuance of this policy the value of our currency is seriously impaired, the basis for reestablishing a free enterprise system after the war will be badly weakened.

As previously noted, an essential part of the operation of a free enterprise system is the flow of savings into investment. Such a flow of new investment capital into productive enterprise is the life stream of private capitalism. When the savings of our people have been fully invested we have had full employment and maximum production of wealth. When, however, these savings have stagnated in idle pools, mass unemployment has resulted. It has been estimated that the total volume of savings which in normal times must be invested annually in this country, both for new plant and replacement of old, in order to produce full employment, is between 20 and 25 billion dollars.

There are two main types of investment, those which are expected to pay their way and earn a rate of return and those which are not. In the former class fall all so-called private investments as well as various types of publicly owned utility enterprises which are expected to be fully self-supporting. In the latter group are a wide variety of public works, including roads, parks, schools, subsidized housing, hospitals, and, most important of all in these times, the instruments of war. These are types of investment which can only be made by the state. Except

OUR PUBLIC UTILITIES IN A FREE ENTERPRISE SYSTEM

for the last, they are both necessary and desirable and they yield non-monetary returns in the form of increased public health and well-being. In the future there can be little doubt that they will form a sizable part of the total of all investments. For we now seem to be entering a period when it is considered the duty of the state to see that all citizens achieve a certain minimum of physical well-being, including the elements of housing, food, and medical care.

HOWEVER, if too large a part of the the community's savings is invested in forms that yield no monetary return there will be trouble. A man who has saved for his old age cannot live on the magnificence of a new post office or the smooth curves of a super highway. If our standard of material living is to maintain its steady rise it is essential that as much as possible of the community's savings should be invested in forms that will yield a tangible and material return—and that is a type of investment that any state short of the totalitarian has difficulty in making. *Totalitarianism is indeed the ultimate end of a public works policy which includes within its scope an ever-increasing portion of the community's economic life.*

We should bear in mind that large-scale state financing of investment, by adding constantly to the national debt,

threatens the stability of the monetary system. Also a gradual spreading of state control, by way of capital investment, into every corner of the economic system puts the whole community at the mercy of any adventurer who can capture the political machine.

Therefore in order that our free enterprise system of economy as well as our system of political democracy may survive it seems essential that the dominant portion of the national savings should in future find employment in fields which are self-supporting and unconnected with the national treasury. In the recent past the utility industry, especially if we include in this industry the railroads, has formed a large segment of this self-supporting investment field. Indeed with respect to making the free enterprise system work this group of industries is of the utmost importance.

IN the five years ending with 1941 new construction expenditures of the electric utility industry averaged \$618,000,000 annually. Such expenditures by the gas industry averaged \$91,000,000 annually in that period. The Bell system, representing about 80 per cent of the telephone industry, spent \$420,000,000 on new construction in 1941, and \$290,000,000 in 1940, a more normal year. If we were to add in the investment of other sections of the industry, including water



“IN the electric utility industry, instances where needed capital additions and improvements were unduly delayed prior to the present war emergency were no doubt quite rare. One can point to only a few cases where the installation in new generating equipment was put off longer than was desirable from a purely technical point of view.”

PUBLIC UTILITIES FORTNIGHTLY

and local transportation, which do not seem to be specifically available, there can be little doubt that the whole utility industry has been investing at the rate of well over a billion dollars annually in recent years.

The railroads have probably been investing an approximately equal amount. Together with the utilities they have been accounting for about one-tenth of the volume of investment which has been calculated as necessary to achieve full employment in this country.

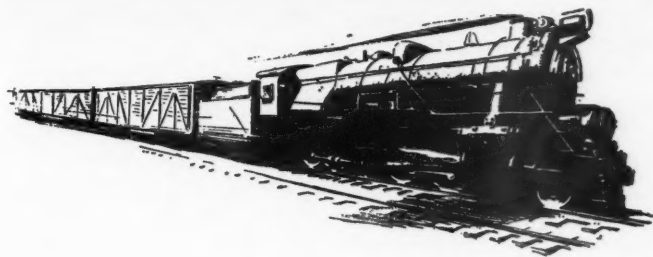
Nor is this the industry's sole contribution toward full employment. In the years 1937 to 1941 the average value of electric household appliances manufactured annually was \$417,000,000 and this must be only a fraction of the total of subsidiary investment to which the utility industry gives rise. Indeed, one is struck with the thought that low and highly promotional electric rates can be a very powerful stimulant to the free enterprise system. The enlarged power consumption to which they give rise makes necessary greater capital investment on the part of the utilities in the form of more turbines, larger transformers, etc. And they also stimulate greater investment on the part of the consumers, particularly in appliances of the more substantial type. Therefore, an electric utility which sells an average of 2,000 kilowatt hours a year to its domestic customers at a 2-cent average rate is doing a much better job of supporting the free enterprise system than one which sells on the average 700 kilowatt hours at a 4½-cent rate.

ONE cannot be entirely satisfied with the rate at which these public

service industries as a group have been able to convert savings into invested capital in recent years. Take the railroads for example: Their equipment has on the whole shown a decided tendency to lag behind the latest advances in engineering science; this notwithstanding the introduction of a limited number of streamline trains. The results of a study of the age of the equipment of seven of our leading railroad systems makes this clear. The financial strength of these roads varies from "triple A" to bankruptcy and they cover the country from coast to coast. There is no reason to believe that they are not representative of all our railroads.

Fully 93 per cent of the locomotives owned by these seven roads at the end of 1941 were over eleven years old, over two-thirds of them were over twenty-one years old. Only 7 per cent were under twelve years old. In the case of one particular road only 2 per cent of its locomotives were under that age. When one considers the very great improvements made in railway motive power in the years since 1930, including the introduction of the Diesel electric drive, these figures are quite disappointing. And for passenger equipment the data are about the same. Only 8 per cent of the passenger cars owned by these seven roads at the end of 1941 were under twelve years old, and half of them were over twenty-one years old.

OF the total units of rolling stock owned including locomotives and passenger and freight equipment, 82 per cent were over twelve years old. Of all such units only one per cent were built in the five critical years from 1931 till 1935 during which the flow of savings



Railroad Traffic Loss

"THE traffic of the railroads has suffered from the inroads of trucks, pipe lines, ships, aircraft, and the private automobile, and as a result their existing equipment tended to become redundant. No doubt a considerable part of this traffic loss was inevitable. However, there is reason to believe that some of it could have been avoided if the railroads had modernized their equipment and service in time."

into investment was at a low ebb and the prestige of private capitalism suffered greatly. In 1933, a year of crisis for the free enterprise system, just 14 new locomotives of all sorts were built in this country.

Nor have the railroads been the only one of the public service industries in which the flow of savings into investment has been less than might have been the case. We are all familiar with local transportation systems which continued to operate ancient and decrepit street cars long after much more modern equipment was available. Even in the nation's second city, Chicago, the equipment on which the people rely for mass transportation on the elevated lines and on most of the surface street car lines is on the whole about thirty years out of date. The enthusiasm with which really up-to-date public transportation equipment has been received when it has been made available has

indicated that in many cases its introduction was long overdue.

In the electric utility industry, instances where needed capital additions and improvements were unduly delayed prior to the present war emergency were no doubt quite rare. One can point to only a few cases where the installation of new generating equipment was put off longer than was desirable from a purely technical point of view. The writer knows of a few isolated instances in which improvements to small water systems were delayed to a point where the health of people served has been threatened. Such instances, however, have been by no means representative of the industry.

THE reasons for constriction in the flow of savings into investment in some of the public service industries have been varied and also interrelated.

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Some will point to the effects of competition. The traffic of the railroads has suffered from the inroads of trucks, pipe lines, ships, aircraft, and the private automobile, and as a result their existing equipment tended to become redundant. No doubt a considerable part of this traffic loss was inevitable. However, there is reason to believe that some of it could have been avoided if the railroads had modernized their equipment and service in time. The limited number of streamlined trains introduced proved quite profitable and popular even before the war-time rail transportation boom. Certainly the failure to invest is an evil which feeds upon itself. A continuous flow of new capital investment is essential for the health and well-being of any industry.

An important part of the trouble has no doubt been of a financial nature and with this matter I would like to deal in some detail. It has long been the custom for important divisions of American industry, including the railroads, to do their financing along certain rather highly standardized lines. Their capital structures have normally consisted of a rather heavy layer of more or less permanent debt, for the amortization of which there was little or no provision, followed by layers of junior securities.

Such a set-up may work satisfactorily as long as an industry is healthy and growing and before any proportionately very large replacements of existing equipment become necessary. New capital requirements may then be met by the sale of more bonds or stocks or out of depreciation accruals. However, let earnings start to slip and the sale of equity securities speedily be-

comes impossible. It may still remain possible for a time to raise capital from outside by the sale of senior securities on increasingly onerous terms. This in brief is what happened to the railroads after about the year 1910.

IN the meantime the obsolescence of existing equipment, together with the failure to retire bonds sold to finance that equipment, is likely to leave the industry with a burden of dead debt. Bonds sold many years ago to finance the construction of railroad branch lines have continued to drain earnings long after such lines have ceased to have much economic usefulness. Other bonds sold to finance street-car lines remain outstanding long after the tracks are torn up and in some instances are supported by the earnings of electric utilities which this old debt had little or nothing to do with creating.

From the point of view of the working of a free enterprise system the main objection to such an overburden of dead or dying debt is that it obstructs the flow of new capital into an industry. It greatly restricts the ability of that industry to turn savings into investments, a process which is quite essential for the operation of private enterprise capitalism. No one is going to invest in either the stocks or bonds of an industry that is up to its ears in debt if, in addition, it appears that much of the physical plant is in need of replacement—at least not unless his investment may be made a clear-cut first claim upon earnings. This latter requirement will usually involve the painful process of bankruptcy.

We will also do well to bear in mind that all permanent debt, if it remains

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outstanding long enough, is likely to become dead debt. And a 30-year bond with little provision for amortization, such as is commonly issued by our private utilities, is in the nature of permanent debt since it looks toward renewal at the end of its term.

FOR these reasons one cannot feel too sure that the usual method of utility and rail finance in this country is best suited to stimulate the flow of investment into these industries, especially when such a flow is badly needed to revitalize an industry. Are there any alternative methods of finance? One such alternative is the method of serial bond finance commonly employed by municipally operated utilities. This method possesses certain notable advantages. By constantly reducing its bonded debt, which is its only form of outstanding capital, such a utility puts itself in a position to incur more debt when this becomes necessary or desirable to raise capital.

For example, take the case of a 30-year serial bond issue bearing 3 per cent interest and serviced by semi-annual payments sufficient to take care of both interest and complete retirement of principal in the 30-year period. Under such a set-up 11 per cent of the principal would be retired at the end

of five years, 24 per cent at the end of ten years, 39 per cent after fifteen years, and 54 per cent after twenty years. And the over-all cost of both interest and bond retirement amounts to just 5.08 per cent of the original amount of the bonds.

This brings us directly to the matter of cost of financing. It is a widely accepted theory that public utility enterprises should be permitted to earn enough to pay a fair return on capital already invested and to attract additional capital as this is needed. Also it seems reasonable to expect that the utilities will raise needed capital in the most economically possible way. For a number of years now an over-all return of 6 per cent or thereabouts has been considered reasonable. This rate presumably does not contain any allowance for the retirement of outstanding capital. Apparently it has been reasoned that while debt capital could be raised at a rate very materially under 6 per cent (many utilities have sold bonds on less than a 3 per cent basis), the cost of equity capital was high enough to require a 6 per cent over-all rate of return.

SINCE this so-called classical theory of utility finance was evolved a number of factors have intervened in



Q "IN times gone by the main market for stocks, utility stocks included, was well-to-do individuals who were of a mind to take a chance. Financial institutions such as life insurance companies which have figured so largely in bond financing are not usually buyers of stocks. The new income taxes are going to cut deeply into the savings of those who are normally buyers of stocks, and based on past experience in such matters these taxes will probably not soon return to their prewar levels."

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RATES OF RETURN ON ORIGINAL AMOUNT OF ISSUE REQUIRED TO PAY INTEREST AND PRINCIPAL ON SERIAL BONDS

<i>Period to Final Maturity</i>	<i>Rate of Interest on Bonds</i>				
	2½%	3%	3½%	4%	4½%
20 years	6.38%	6.54%	6.69%	6.84%	7.00%
30 years	4.76	4.92	5.08	5.24	5.41
40 years	3.97	4.14	4.31	4.48	4.66



our economy. Most important of these has been the advent of low money rates, the maintenance of which has become an established part of government policy. Considering the tremendous borrowing demands of war finance and the huge refunding program in the years after the war, it seems reasonable to expect that every effort will be made to keep money rates at around present levels for as far as one can see into the future. These low money rates apply to bond financing but they do not apply to stock financing. The latter remains a quite expensive and uncertain proposition.

In times gone by the main market for stocks, utility stocks included, was well-to-do individuals who were of a mind to take a chance. Financial institutions such as life insurance companies which have figured so largely in bond financing are not usually buyers of stocks. The new income taxes are going to cut deeply into the savings of those who are normally buyers of stocks, and based on past experience in such matters these taxes will probably not soon return to their prewar levels. Besides, it is hardly worth while to buy a stock to yield 6 per cent or even 8 per cent, assuming the risks inherent therein, if two-thirds or three-quarters of this return goes to the tax collector. In

the future a larger proportion of savings than in the past will probably come from the middle income groups and from financial institutions, neither of which are normally buyers of stocks on a large scale.

FOR these reasons, it seems to the writer that a utility organization which can finance itself entirely or largely by the sale of bonds will in the future be at a very great advantage over one which must raise a large part of its capital in the form of stock. This will be especially true if the bonds mature serially. We may note that San Antonio was able to finance the purchase, at a very generous price, of its electric and gas utilities by means of serial revenue bonds bearing an average interest rate of less than 2½ per cent. Other municipalities have done even better. It is true that these bonds enjoyed tax-free status but many were bought by financial institutions to whom the tax-exempt feature means little. Also these were revenue bonds not backed by the general credit of the issuer and subject to all the risks of functional obsolescence attending utility securities in general. It seems likely that if these bonds had been fully taxable they could have been sold to yield not a great deal more than was

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actually the case, probably within half of one per cent of U. S. government bonds of similar maturity.

The accompanying table gives an accurate idea of the cost of serial bond financing. It expresses the over-all rate of return which must be earned assuming various interest rates and various periods of serial repayment. For example, an issue of 3 per cent bonds maturing over thirty years could be completely serviced by an annual amount equal to 5.08 per cent of the total original issue. If the financing could be done on a 2½ per cent over-all basis and maturities spread over forty years, the annual charge would be reduced to 4.14 per cent of the original amount of bonds.

The public utility industry, because of its relatively stable earnings and monopolistic position, is one of the few industries to which this serial bond financing is suitable. However, the writer is not in a position to suggest the exact manner in which it could be used in greater degree by private utilities in place of term bond and stock financing. Undoubtedly, serious difficulties stand in the way. It is merely suggested that this method of financing holds certain advantages over the more rigid and static capital structures now commonly employed. In the long run, it is likely to prove cheaper. Also by the rather rapid retirement of capital obligations, it puts an industry in a better position to finance new investment which is necessary for the survival of our free enterprise system.

AND now to summarize: I have tried to point out that free enterprise private capitalism has never been a universal world economic system and its prestige, always greatest in the English-speaking countries, has been declining relatively since World War I. For the revival of this system after World War II some system of collective security to insure a peaceful world seems essential. And for this in turn greater freedom of trade between nations together with stable currencies are prime requisites. Also we must bear in mind that free enterprise involves free competition, and combinations of producer pressure blocs, to control prices and restrain production, are likely to undermine the private enterprise system by raising demands on the part of the mass of consumers for intervention by the state.

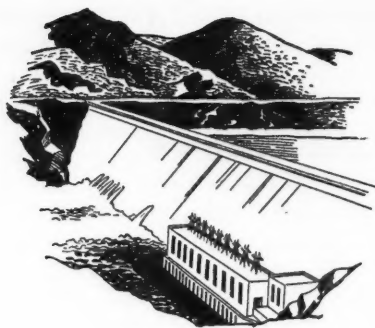
The main criterion of the success of the free enterprise system in future as in the past will be its ability to sustain reasonably full employment. This in turn will depend upon the free flow of savings into investment in private industry.

In this matter the public utilities and railroads occupy a position of dominant importance. In the past rigid capital structures, including a heavy proportion of permanent debt, have imposed obstacles to the free flow of savings into some of these industries. As at least a partial remedy for this sort of thing in the future I have suggested the greater use of serially maturing bonds.

Q "If we would preserve private enterprise, if we would preserve the profit system, we must now take the profit out of war."

—JAMES F. BYRNES,

Director of Economic Stabilization.



Public Power and the War Cloak

The author discusses and analyzes the latest activities of the government ownership advocates in spite of the reprimand of the voters last November.

By HERBERT COREY

SCENE: a street in Naples.

TIME: before everyone went loco.

DRAMATIS PERSONAE: Chauncey Snow of the U. S. Chamber of Commerce, and Charles H. Bunting, manufacturer of Columbus, Ohio; an unidentified housewife in a fifth-story window; a goatherd; a herd of goats.

MR. SNOW: "List. A 'peep, peep' falls musically on my ear."

Mr. Bunting: "Hah! 'Tis the whistling housewife in yonder casement."

The housewife lowers a bottle on a string. The goatherd milks a she-goat into the bottle and peeps his signal. The housewife pulls up the bottle. Mr. Bunting addresses Mr. Snow:

"You know," he said, "that is a most inefficient way of handling that situation. The woman should have hauled up the goat."

This story came to mind during a recent consideration of the operations of and on the public power bloc. In the old,

calm, conservative days the public played the part of the housewife in the window, and the utilities doubled as both the herder and the goat. The vital essence was bottled and pulled up on a string. It was no doubt a process that had its faults. Neither the housewife, the herder, or the goat could have been completely satisfied. As time went on installations were improved, rates were lowered, service was bettered until every home within a reasonable radius could have a telephone and then electric lights and refrigerators and vacuum cleaners and automatic heaters and the innumerable other gadgets that added to its pleasures. Then the public power bloc went into action and began to pull the goat up to the fifth-story window.

OF late the formerly quiescent onlookers—the Mr. Snow and Mr. Bunting of the parable—have begun

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to show doubts about this form of political mechanics. They seem to think it is not efficient, after all. In Nebraska farms are flooded and the power that was promised seems not to have been enough to keep everyone happy. So Senator George W. Norris, a good old man, sincere and earnest and fine, was knocked out of the U. S. Senate. Even those who think that Senator Norris' theories of economics are not far short of ridiculous bear witness that he believes in them and that if you agree with him he is kind. Down in the Arkansas river country Clyde Ellis campaigned vigorously before the primaries. This writer never had the pleasure of listening to Mr. Ellis, but he is informed that Mr. Ellis is an easy oratorical sweater for public ownership. They say that some of the echoes of his speeches are still booming around the Arkansas valley. But he lost. Senator "Josh" Lee did not hurt himself with the Oklahoma electorate when he sought to keep the demon rum away from Army camps.

Oklahoma has been in the habit of voting dry for a long time. It is true that some of the drinks one can buy in Oklahoma must be made fresh and fresh each day, because they burn the bottoms out of glass bottles in four hours. In a recent rodeo contest in Oklahoma a champion rider took one teentsie drag out of a bottle of Oklahoma's Bonded Best and then threw his horse clear out of the arena. These facts are offered merely as evidence that Senator Lee's prohibitive purity did him no harm. But an idea had become prevalent that publicly owned power usually takes money out of the taxpayer's pocket instead of flowing it in, and Mr. Lee was added to the

Book of Martyrs. Among others who found themselves under the teeth of the harrow was Clarence Dill in Washington. Mr. Dill was scared by a utility when he was very young and has ripped into every one he has seen ever since; Mr. Dill was entitled to a seat in the lower house on his record, if the voters of Washington were still concerned about continuing to put power into politics. But it seems they were not. The bitter tale might be extended.

It should be noted, however, that anyone who thinks that the public power bloc will slacken its efforts is mistaken. They have made the Tennessee valley reasonably happy for the Lillienthal man—Senator McKellar being an exception—and they would go on to do the same to the rest of us. The members of the public power bloc are allergic to red. They cannot see it. It may shine on the off-side of the ledger like a Pennsylvania barn and it only seems to the bloc an evidence that good has been conferred on someone somewhere. And for a long time a majority of voters in the affected areas agreed with them. The strength and the weakness of the public power bloc is that all the rest of us are human. If we are tickled we titter. If an evangelist comes along and says:

"Vote for this and I'll put money in your pocket—"

That's the way we vote. TVA had an angel on every street corner, robed in white samite and carrying a horn of plenty so big he had to rest it on his shoulder. As long as the goodies poured out of that horn the valley was content by a count of noses. Money was being spent. Farms were being bought. Roads were being built. Figures were

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produced before Congress to the effect that TVA could not live through the winter if it were forced to obey the economic laws which privately owned utilities must obey or bust. The Congressmen went out to the cloakroom and told each other dream stories. Maybe you've heard the latest dream story, of the London lady of quality who joined the WAAC's. After a time she went home on leave and the maid drew her a hot bath and she dined before the fire on a tray of sandwiches and champagne and by and by she put on her filmy nightgown and sank to sleep in her luxurious bed. She dreamed that a tall, dark, sinister stranger entered her bedroom and snatched her out of bed and carried her to the street and put her in a swanky Rolls-Royce and drove away. After a time he stopped the car and turned to her and with one brutal blow snatched off her flimsy gown.

"Oh, Heaven," she moaned. "What are you going to do with me?"

"How the heck do I know," he said. "This is *your* dream."

VOTERS in other states are not as pleased now with TVA as is the valley.

A tide of taxes is rising. We will all pay, and cheerfully, for the cost of the war, but conditions may

compel us to shave down some of the other costs which we have been paying during the last few years. Some of the states are trying to pare their tax bills. The National Resources Committee has made a plan for the betterment of everyone when the war comes to an end. George B. Galloway, one of the expert delvers into the future, informs me that there are about 200 more or less well-financed organizations busily planning, not to speak of fly-by-night groups that pass the hat when they need stamps. Not one of them seems to worry about the cost of the unquestionably needed improvements in a rickety old world and most especially they do not fret about what the taxpayer will think about it. A large and bellowing group of planners insist that the only way in which we can achieve post-war happiness is by extending the operations of the government. The President recently suggested to Congress that after the war all transportation facilities might be placed under the control of a government bureau.

The one thing that seems certain to some of the aggrieved is that if this issuing and spending of dollars continues after the war the time will come when it will be worth about as much as a counterfeit paper lira. That's inflation.



Q"OKLAHOMA has been in the habit of voting dry for a long time. It is true that some of the drinks one can buy in Oklahoma must be made fresh and fresh each day, because they burn the bottoms out of glass bottles in four hours. In a recent rodeo contest in Oklahoma a champion rider took one teentsie drag out of a bottle of Oklahoma's Bonded Best and then threw his horse clear out of the arena."

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It seems advisable, therefore, to look for a moment into what is being done now by the power bloc, in spite of the reprimand by the voters last November. The Santee-Cooper project may be examined first, because it offers an almost perfect collection of the items to which the believers in private ownership object. One of these items is the fact that when it was first proposed there seemed to be no considerable market for whatever power it might turn out. With no market Santee-Cooper would be a money loser. The state was obliged to reckon, however, with the promise that the Federal government would spend millions on it, this being in the heyday of the public ownership movement, when anyone who had a spring in the back forty could get money from the government. Federal money meant the hiring of men and the buying of supplies and Great Day in the Morning generally. The state was willing to take the money. This believer in human nature as-is could not be induced to chide. But the state did not propose to step into a trap. It consented to the borrowing of sums from the Federal government against an issue of revenue bonds, but it made plain by statute that it accepted no responsibility for the bonds. It did not underwrite them. It merely printed them. If the Federal government wished to give out money against them, that was the Federal government's welcome privilege. After all, if the bonds defaulted it was assumed that the Federal taxpayer would pay.

Let us look at the record, as Al Smith used to say.

ON the basis of the latest available figures the total cost of the San-

tee-Cooper project is in the neighborhood of \$61,000,000. A matter of \$642,000 might be added but will not be, because the writer is determined to put a better face on the project than he really believes he can. Of that, roughly speaking, the Federal government gave outright \$39,500,000. It might be observed here that the Federal government is made up entirely of you and me. It has no independent life of its own. When it gives away money it gives away your money and my money because we are its only reservoir of cash. It then loaned something like \$21,500,000. If Santee-Cooper is able to sell cheap power to the vicinity it is because the actual investment is so small. The part given outright by you and me and the small businessman out in San Diego was loaned against revenue bonds issued by but not underwritten by the state of South Carolina. If those bonds were over-the-counter offerings the prospective purchaser would at least have a second look.

"The security," he would say, "seems to be made up of hopes."

But it is a little more than that. Officials of the Federal government on being interrogated became a little frosty. They said that, of course, South Carolina would pay those bonds. The F.g. had loaned millions to other states, they said, and the other states either had paid or would pay up. They had no option.

When the government bore down the state would be obliged to pay up, whether it wanted to or not. At this point a curious question in ethics seems to arise. Maybe it only seems. Ethics have been where you can find them during the last few years. But the incident seems to simmer down to this:

State Monopoly in South Carolina



"... the voters of South Carolina and other states once burned their fingers on a state monopoly. In the effort to control the liquor business... the states set up the state dispensary systems. These systems soon became political monopolies as well as liquor monopolies, and the states had the dickens' own time getting rid of them."

THE state of South Carolina sold to the Federal government certain bonds of the value of which it thought so little that it openly and by statute declined to accept any responsibility for them.

The Federal government accepted this refusal by the state government but loaned the taxpayers' money on the theory that when the time came it could, if necessary, work some shenanigan to get the money out of South Carolina.

When the Santee-Cooper got ready to operate it lacked customers. That had been foreseen by the legislators when they declined to underwrite those revenue bonds. But there are good, sound, privately owned utilities in the Santee-Cooper area which the public power bloc coveted. If these utilities could be bought or sandbagged then the Santee-Cooper could become a going concern. It might pay off the money it owes. The PWA, which loaned the \$26,000,000 on the revenue bonds, now announced that if the utilities were not taken over its revenue bonds would be jeopardized. It becomes apparent that this taking of the private properties was the concealed security on which the PWA had counted when its officials said that it could and would get

the money back from South Carolina. The owners of the stocks and bonds of the private utilities would be compelled to sell their properties to the Santee-Cooper. In this way a Federal-or-state monopoly would be created, the private utilities frozen out, and South Carolinian users of power would be in the hands of a more horrific octopus than Senator George W. Norris ever dreamed of in his most frightened moments.

THERE are elements in this situation that will be passed over here because space is lacking. There will be, for example, an appeal to the legislature backed by the power of a Federal government that used to give away millions and would enjoy continuing the giving away, except that the necessity of providing for war needs is getting in the way. By the time this appears in print the legislature may have met and passed on the case. The supreme court of the state once refused to permit the Santee-Cooper to carry out a part of this plan of expansion and ultimate monopoly, on the legal ground that the authority is without power to do these things. It declined to consider one of the most extraor-

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dinarily candid appeals made by any representative of the Federal side of the public power question since the first settler moved into the Tennessee valley. To quote only a few lines:

The court will take judicial notice that one of the (New Deal) policies was and is the bringing of the business, manufacture, and sale of electric power into public ownership . . . To assert in legislation in 1934 that this was the purpose of a statute would have been folly . . . It was sought to evade the constitutional questions involved by declaring a more generally accepted "public purpose" . . . to encompass within such legislation additional provisions to give effect to this new social policy.

The opening wedge of a further plan to create Federal monopolies may now be seen in the LaFollette amendment, which will be considered later. At this point it should be observed that the voters of South Carolina and other states once burned their fingers on a state monopoly. In the effort to control the liquor business—and it might be added that efforts are under way at this moment to find some method of reducing to order a liquor business which has again run wild in the South—the states set up the state dispensary systems. These systems soon became political monopolies as well as liquor monopolies, and the states had the dickens' own time getting rid of them. It is difficult for the outsider to see how a state- or federally-controlled monopoly of electricity could avoid being a political machine as soon as the monopolists began to name the first meter readers.

To return to the LaFollette amendment.

If this becomes a part of the law structure it will make the formation of a political plus electrical monopoly so easy that a child could do it. First

of all, it exempts from income taxes nonprofit public utility corporations. The corporation may be organized on the petition of no more than 10 per cent of the voters who might be served by the corporation's facilities and in no event need the number of signatures exceed 10,000. It is then provided—please read this slowly—that officials of the Federal, state, or local governments shall make up a majority of the corporation's board of directors. This is in obedience to the only law of nature in which the public ownershippers firmly believe, which is that only a government official can be trusted. A citizen should wear a red hat if he wishes to escape being shot.

The amendment suggests a new kind of nonprofit corporation. Profits may be made, but they must be used for payment of principal or indebtedness of the corporation.

"When such indebtedness is finally liquidated, and that should not be a difficult task for a corporation which has become a nonincome-tax-paying monopoly, the corporation must turn the property over to

"The United States, or any state, or any political subdivision, agency, or instrumentality of the United States, or of any state which may be authorized by law to accept and operate such property for the benefit of the public."

So that the Santee-Cooper, to return again to that interesting product of the gentlemen who, according to the pleaders of their own lawyers, as quoted above, wrote swindling words into a statute for the purpose of cheating you and me and the small businessman in San Diego, after squeezing out the private utilities in its area, and be-

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ing freed of income tax, and having been established by a gift of two-thirds of its investment, could in time pay off the loan made by the government. Then it could turn over the \$61,000,-000 property to

The United States, which thereby sets up a Federal monopoly in South Carolina;

Or to the state of South Carolina;

Or to the TVA;

Or to Mr. Ickes' Interior Department, or to the Federal Power Commission, or any other governmental agency authorized to accept it. But there is more to it. The obvious intent is to suggest a way for the ready transfer to public ownership of properties "disintegrated" by the SEC under the death-ray clause of the Holding Company Act. Birmingham and Jefferson county, Alabama, have several times refused by vote to take any steps toward the purchase of certain privately owned properties ordered divested by the SEC from their present owners. Yet under this amendment the will of the majority could be defeated by a 10 per cent minority of the voters served by these facilities, for a tax-exempt, so-called nonprofit corporation could always outbid any contender for the property.

THE sequence is that the government first gives away the money

of the taxpayers; then it loans more money on security that could never be accepted in the market; the property to which it has given and loaned proves to be nonprofit making; whereupon to protect its investment the Federal government asserts the right to take away the property of private individuals. Just to sweeten the medicine to the private investor a way has been found by which his investment will cease to be so attractive to him. The President sent a letter to the secretaries of the War and Navy, to Admiral Land of the Maritime Commission, and to Jesse Jones of the RFC, advising them that electric power for war plants must be bought from the least expensive source. Offhand that seems all right. But a war plant may be compelled to hurdle the nearest available power company and contract for cheap power from a distant source. Delivery would then be made over the lines of the intervening company under the FPC's war authority to make a "common carrier" of the power company's lines.

An evidence of the manner in which the private investor can be manhandled may be found in the case of the Pensacola dam. This is a statement of that case by an authority:

The Federal government financed the Pensacola dam for the Grand River Authority of Oklahoma. There was considerable squabbling with the state during construction over highway relocation and other mi-



Q"THE effort to refinance the Nebraska-Norris hydroelectric projects might have gone through nicely except that Nebraska municipalities got through the legislature a law requiring the payment of taxes before the payment of interest. The towns needed the taxes the private utilities had always paid, and somewhat belatedly awakened to that fact."

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nor issues. The state took over control on completion. At the outset the project was uneconomical, but ultimately a profitable outlet was found by selling power to private companies. This so displeased the public ownership crowd in Washington that they instituted a kind of foreclosure proceeding and turned it over to the PWA in Washington to operate. The REA is doing the operating but it is the PWA that directs.

Other instances might be found.

ELEVEN major power companies in eight southwestern states pooled their facilities to provide power for war purposes. A concise statement may be made that the 11-company pool was in a position to furnish the power required for the development of an aluminum plant. Then REA moved into the picture. REA at the time had neither plants nor lines. "It is," in the brief furnished by the affected companies in one of the cases arising out of the REA move, "increasingly evident that REA is playing a leading rôle in the formation of a public power project for Missouri by promoting the development of new power sites and acquiring existing utility systems. Apparently the plan is to integrate the present REA coöperatives and the municipally owned systems with the purchase of contiguous utility property."

In a collateral case the Arkansas Department of Public Utilities felt called on to observe that one of the REA operations "may serve to settle and foreclose the question as to whether, after the war, private utilities in Arkansas shall be regulated by publicly owned and subsidized competition. In

our judgment this is a question which should be settled either by the state legislature or by Congress." The attitude of the Federal Power Commission toward the utilities is shown by the statement of Chairman Leland Olds in a Little Rock hearing:

"The engineers of the (utilities) should not know the plans of the government for dealing with the power situation in this area."

IT would have been so much better for the public power bloc in Nebraska if the public had not learned what was going on. The effort to re-finance the Nebraska-Norris hydro-electric projects might have gone through nicely except that Nebraska municipalities got through the legislature a law requiring the payment of taxes before the payment of interest. The towns needed the taxes the private utilities had always paid, and somewhat belatedly awakened to that fact. In consequence a trustee plan was set up under which, in effect, taxes are paid first; then the trustee bank gets the interest due; and in what amounts to a second mortgage the Federal government is assured that if the revenues permit it will be paid interest on something like \$30,000,000 it loaned on top of almost an equal gift.

The conclusion is that the public power bloc is pursuing its designs under cover of the war. But as Old Doctor Munyon used to say in the patent medicine columns:

"There is hope."

Q "The breaking up of monopoly restrictions today will cause no present economic dislocation. It will bring inestimable future benefits."

—THURMAN ARNOLD,
Assistant Attorney General of
the United States.



The Base for Rate Regulation

Confusion arising from misinterpreted terms, such as "value," "capitalized investment," and "prudent investment."

By LYLE H. OLSON

As a result of the recent Natural Gas Pipeline decision¹ of the Supreme Court, there is now before us for renewed critical consideration the matter of the utility rate base and its application to the regulation of industry. What is a rate base and how shall it be measured? This is a vital issue, the adjustment of which is necessary to the satisfactory relationship of government and business.

The definition and the determination of the rate base should be simple problems, but can be made to appear complicated for lack of terminological and technological clarity and the misunderstanding and abuses that have resulted in theory and in practice. This matter ought to be removed from the realm of abstract theory and from its technological and terminological abuses.

Semantics, or the practice of using more accurate and understandable words for new or complicated development, has recently been projected into the common vocabulary of the public.

¹ Federal Power Commission v. Natural Gas Pipeline Co. (1942) 42 PUR(NS) 129, 315 US 575.

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The application of this art might help to clarify the discussion, if applied to the various terms involved in the consideration of the rate base.

Stuart Chase suggested certain understandable words for the Temporary National Economic Committee and in recent articles has applied semantics to some of the terms entering into this discussion. Terms related to rate base determination include value, fair return, original cost, reproduction cost, accrued depreciation, depreciation reserve, depreciation accruals, depreciation provisions, prudent investment, and earnings. Words necessarily have modifications of their meanings in accordance with their use in specific cases.

The term "value" itself is one of the most elusive and variable terms in economics. It is defined as applying to any numerals with the dollar sign (\$) attached, as well as to the fair sales price between a willing seller and a willing purchaser. The word "value" needs qualification as to its application in the specific case. The term "rate base" needs an accepted definition either synonymous with value or as having a dis-

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tinctively separate meaning not necessarily synonymous with value.

THE Natural Gas Pipeline Case has renewed the discussion² of the *Smyth v. Ames* rule and the principles governing the determination of a fair return to be allowed a public utility enterprise.

In the *Smyth v. Ames* decision (1898) the Supreme Court said "the basis for the reasonableness of rates . . . must be the fair value." And "to attain that value," the court enumerated the following very specific factors for consideration:

Original cost of construction

The amount expended in permanent improvements

The amount of market value of its bonds and stocks

The present and original cost of construction

The probable earning capacity of the property under particular rates prescribed by statutes

The sum required to meet operating expenses

Other matters to be regarded in estimating the value of property

These factors are not those that would apply to the determination of

value as understood in economics. They are provisions that might or should be considered in the determination of an amount to represent a fair rate base. With a full knowledge of the facts as they might be determined under these respective headings, correct judgment may be made as to the economic merits of a just and reasonable amount for the rate base.

WHERE the original cost was in excess of present cost, this might be entitled to some consideration in equity, as between the stockholders and the consumers. There might be other cases where the original costs are so out of line with the present costs of equivalent property as to have little equity. The market value of stocks and bonds might be a very uncertain factor and entitled to little consideration. Consideration of the probable earning capacity of the property might have to be subordinated to the investment measured either in terms of original cost or of reproduction cost in determining an equitable rate base.

Under regulatory conditions we have a premise for a rate base quite different from "value" as contemplated by the classical economists. It may be that the term "fair value" in the *Smyth v. Ames* decision, should be interpreted as meaning a fair amount to be determined after judicial consideration of the factors specified. Such interpretation is entirely consistent with the formula presented and the equity and practicability of its application in regulation. Now it is probably not "lese majesty" to assume that the justices in this case used the term value in its more common usage and not in its stricter economic definition. That "fair

²A couple of analytical and controversial articles are: PUBLIC UTILITIES FORTNIGHTLY (Aug. 27th, at p. 277 and Sept. 10th at p. 350)—Paul B. Coffman's, vice president of Standard & Poor's Corporation, articles on "The Direct Approach to the Fair Return Question" support the "ascertainment of the sum total of dollars required by the company to maintain its credit position, as determined by an investors' appraisal of the risks of capital employed in the business. To accomplish this, neither a rate base nor a rate of return need first be determined."

Harvard Business Review (Summer Number). R. W. Harbeson's, assistant professor of economics at Rutgers University, article on "Public Utility Regulation: A New Chapter," advises that the recent Supreme Court decision in the Natural Gas Pipeline Case may result in "the demise of that hardy perennial—fair value."

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value" was used as synonymous with "fair amount" is confirmed by the specific factors enumerated for consideration.

"**V**ALUE" is not applicable and in practice has not been used as the exact equivalent of "rate base." Subsequent decisions of the Supreme Court have been consistent with this interpretation, with some insistence upon the consideration of the cost of reproduction, and its specific application as a basis for computing depreciation in the determination of fair return. It is not inconsistent that cost or reproduction of the depreciable assets be used as the basis for depreciation and that a fair amount or some modified basis represent the rate base.

In Natural Gas Pipeline decision Justices Black, Douglas, and Murphy, in a separate opinion concurring with the majority, said: "While the opinion of the court erases much that has been written in rate cases during the last half century, we think this is an appropriate occasion to lay the ghost of *Smyth v. Ames* . . . ; as we read the opinion of the court the commission is now freed from the compulsion of admitting evidence on reproduction cost or giving any weight to that element of 'fair value.' The commission

can now adopt, if it chooses, prudent investment as a rate base . . . in view of these provisions, we do not think it is permissible for the courts to concern themselves with any issues as to the economic merits of a rate base."

THE purpose of the minority justices apparently would be to set up mandatory provisions with reference to a prudent investment (never completely or satisfactorily defined) rate base, possibly as an equivalent to capitalized investment basis overthrown in the interest of the consumers by William Jennings Bryan as attorney for the state of Nebraska in the *Smyth v. Ames* Case.

This raises the question as to whether any fixed formula can uniformly result in a just and reasonable rate base, and if an equitable rate base can be defined except for the specific case. It may be desirable to reconsider the structure of a rate base. Possibly "fair value" and "prudent investment" should be superseded by terms to be more accurately defined and applied with less misunderstanding.

It would seem that if we could put aside for the time being the poorly defined and misinterpreted terms, "value," "capitalized investment," and "prudent investment," and consider



Q "THE term 'value' itself is one of the most elusive and variable terms in economics. It is defined as applying to any numerals with the dollar sign (\$) attached, as well as to the fair sales price between a willing seller and a willing purchaser. The word 'value' needs qualification as to its application in the specific case. The term 'rate base' needs an accepted definition either synonymous with value or as having a distinctively separate meaning not necessarily synonymous with value."

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solely what would be a just and reasonable rate base, some progress might be made.³

At the present time, the original *v.* reproduction cost issue is not as vital as during some prior years, inasmuch as the variations in cost during the past quarter of a century have been such that the cumulative results of actual costs may not be inconsistent with present reproduction costs. Of course, the reproduction costs may be determined as of any dates and the date may be selected in accordance with the assumed equity in the particular case.

THE Supreme Court specifications in value cases are different than in rate base cases. In cases of corporate reorganization the fair value is that which is understood in economics and in the market. It is without the qualifications or limitations required by a rate base.

In the determination of value for reorganization, earning power is one of the controlling factors. Here we have as an authority the decision of the Supreme Court in 1941 in the Consolidated Rock Products⁴ reorganization case, from which I quote the court as follows:

Findings as to the earning capacity of an enterprise are essential to a determination of the feasibility as well as the fairness of a plan of reorganization . . . Since its application requires a prediction as to what will

occur in the future, an estimate, as distinguished from mathematical certitude, is all that can be made.

Here we have a formula for "present fair value" (term from another portion of the decision) very adequate for the estimate of "value" for reorganization and distinctly different from the equally adequate formula for a just and reasonable amount as a "rate base." The court said: "Absent the requisite valuation data, the court was in no position to exercise the informed, independent judgment which appraisal of the fairness of a plan of reorganization entails."

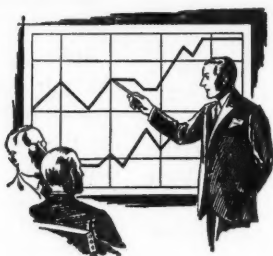
It should be observed that in the *value* formula no reference is made to "original cost" and the market value of bonds and stock which, though they might be considered, are not material for the estimate of value. The *rate base* formula also includes "probable earning capacity under rates prescribed by the statutes," which may not be controlling for a just and reasonable rate base, but would be controlling as an element of value.

IN the case of public utilities as well as industrial properties there are conditions where both rate base and values are required. These findings may involve consideration of such factors as original cost, reproduction cost, accrued depreciation, depreciation reserve, depreciation accruals, depreciation provision, market value of securities, and earning power. It is of great importance that these terms and their application are correctly defined and understood. Each may have an important contribution.

One of the desirable steps to the end is the establishment of essential prin-

³ The price level has gone through marked changes with increases from 1898 to 1916, accelerated upward trend from 1916 to 1920, and with marked downward and upward trends during subsequent years. Therefore, the possible distinction between the basis of reproduction cost as a factor of value and original cost as a factor of investment becomes a vital matter. The same degree of variation will occur between the original costs as of different dates.

⁴ 312 US 510, 525, 85 L ed 982.



Value versus Rate Base

“THE Supreme Court specifications in value cases are different than in rate base cases. In cases of corporate reorganization the fair value is that which is understood in economics and in the market. It is without the qualifications or limitations required by a rate base. In the determination of value for reorganization, earning power is one of the controlling factors.”

ciples of appraisal procedure that will permit reports to be analyzed and compared. Adequate requirements should include disclosures of the premise upon which findings are established, what elements of value are included, and the constituent factors included in the make-up of capital costs, depreciation, operating cost, earning power, and other elements of capital and value.

Disclosures in the reports or testimony should distinguish between the differences that result from the principles followed and those resulting from different facts or opinions, and permit appraisals on the basis of original cost and reproduction cost, and appraisals by different appraisers being intelligently compared.

THE basic evidence for value and rate base consists of the used and useful assets. These may be measured by either or both original costs and

reproduction costs. Such costs are factors to be considered. They have different weights as evidence.

The controversies in reference to the expediencies of use of original and reproduction costs result in large measure from misunderstandings. One of the incentives for the consideration of original cost as a premise for a rate base was a misconception as to the simplicity of the method and the availability and accuracy of the data.

There is also an unjustified confidence in the validity of readily available records in reference to original costs. The proof of the original costs of property now used and useful is frequently time consuming and expensive. Methods of accounting vary and there may be little reconciliation of the records with the changing properties. That the requirement for a standard classification of accounts on the basis of original costs is very costly and time

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consuming is evidenced by the recent report from Utah that "Culminating six years of studies by state and Federal accountants, the state public service commission and the Federal Power Commission recently issued a joint report fixing the original cost of the Utah Power & Light Company's electric plant at \$52,552,860.91 as of January 1, 1937. The figure is \$31,041,458.38 lower than the original cost figure of \$83,594,319.29 previously submitted by the power company."⁵

THERE is also lack of confidence in the processes of determining reproduction costs. Past abuses of procedure and misapplication of findings are in part responsible for this. Reproduction costs are relatively easy to determine and are comparatively well-known and supportable facts. That original or reproduction costs should be just and reasonable as applied to the used and usable assets should be determined as evidence to reveal the accounting and economic abnormalities. The relative practicability and accuracy of the determination of reproduction costs and original costs have been subject to much controversy and misunderstanding. These differences and inaccuracies of procedure should not confuse consideration of the principles at issue. The controversies should give way to knowledge and understanding.

There is a readily analyzable relation between original costs and reproduction costs. The market records of the details are available.

Original costs are not evidence of value but have certain statistical im-

portance. Reproduction costs are important evidence of value. Both can be analytically compared. They have different applications.

AN equally important question to be considered is what the recorded or determined amounts for both original cost or reproduction cost include in the way of direct and indirect expenditure, overhead and organization and development charges. (I omit the poor terminology of "going value.") When costs are to be compared the reviewer should determine that both include the same elements or require that the differences in the elements included be made known.

Prudent investment usually refers to a modification of original cost. However, prudent investment may refer to modifications of original cost or reproduction costs, depending on whether considered retrospectively or currently. Should the investment have been prudent at the time it was made or would it be prudent under present conditions?

As the matter of depreciation has not so far been mentioned, I will not discuss this controversial element here. It applies similarly to both original and reproduction costs and to prudent investment.

THE minority opinions of Justices Black, Douglas, and Murphy (Natural Gas Pipeline Case) recommend that the regulatory commission have final determination of amounts representing rate base or value. There are several divisions of responsibility and opinion as to where the final determinations as to values should rest.

Appraisers bear the first responsibility and independent qualified ap-

⁵ PUBLIC UTILITIES FORTNIGHTLY, August 27, 1942, p. 322.

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praisers believe that the facts could be most economically and conveniently determined by agreement between appraisers with any differences of opinion to be adjusted by a regulatory body. Substantial progress has been made in the reconciliation of the findings of independent appraisers and the engineers of commissions.

Commissions believe they should weigh the evidence and have final jurisdiction as to the amounts of rate base, value, and returns. States believe that, except in exceptional cases, the state courts and not the Federal courts should make final determination.

The Federal Supreme Court still holds final determination notwithstanding the Black-Douglas-Murphy dicta that it should not be permissible for the courts to concern themselves with the economic merits.

As to the commission's responsibility and attitude, former ICC Commissioner Thomas F. Woodlock in *The Wall Street Journal* recently directed attention to two different opinions on the judicial function of Federal administrative powers: Of these powers Elihu Root said in 1916:

Yet the powers that are committed to these regulating agencies, and which they must have to do their work, carry with them

great and dangerous opportunities of oppression and wrong. If we are to continue a government of limited powers these agencies of regulation must themselves be regulated. The limits of their power over the citizen must be fixed and determined. The rights of the citizen must be made plain.

And James M. Landis (in "Symposium on Administrative Law 9," *American Law School Review*, quoted by the authors on page 230) opines that:

Partisanship or zeal on the part of administrative tribunals in behalf of the rights they are created to protect is as much expected of them as zeal on the part of judges in the defense of that body of rights we are pleased to call our liberties.

NEVERTHELESS, final opinions have to be formed and should be arrived at more economically and promptly than has been done in the past. This is possible if practical regulatory consideration is given to the problem.

The SEC, on account of its varied responsibilities involved in the consideration of financial reports for different purposes in registrations, financing, reorganizations, and public utility holding company regulation, and indirectly for income and property taxes, would seem to be a logical and available organization to make a major contribution to the solution of this regulatory problem.

"WHILE every ounce of concentration of resources and of energy is demanded for the successful prosecution of the war, it is important that we look beyond these stressful times to the era that will follow; an era of secured and revitalized democracy; new frontiers of business development; new markets for the American products of peace and good will.

"But it is also necessary that we keep the fact uppermost in mind that it is only by a victorious defense of our democratic processes can we accomplish these objectives. We will not have won the war if, in defeating the forces of aggression, we permit our free institutions to be wrecked or undermined. Speaking as a farmer, we must preserve the 'seed corn' of our peace-time economy so that the post-war planting will be made more fruitful."

—EMIL SCHRAM,
President, New York Stock Exchange.



Wire and Wireless Communication

VOICE communication by underground transcontinental cable was conducted officially for the first time in American history last December 21st. Walter S. Gifford, president of American Telephone and Telegraph Company, and N. R. Powley, president of Pacific Telephone & Telegraph Company, one in New York and the other in San Francisco, formally opened the new channel which has been building since 1940.

The closing gap was the 488 miles of channel laid by Pacific Telephone & Telegraph Company between Sacramento, California, and Wendover, Utah, as part of the 1,600-mile Omaha-San Francisco carry which for the last three years has been American Telephone's major communications undertaking.

The new underground channel which will expand the Bell system's ability to handle transcontinental load was designed with war threats in view. Four other transcontinental lines cross the western part of the United States, but on all these there are vast stretches of open wires carried on poles and cross arms subject to the hazards of wind, ice, and fire.

Many technical details of the new underground cable remain secret. The capacity of the new channel, however, exceeds that of any other transcontinental metallic circuit. It will contribute to radio communication, and is the most advanced development in the world in long-distance telephony.

Investment in the undertaking may be judged from the fact that cost of the Sacramento-Wendover link was estimated by engineers at about \$7,000,000, or an average of not far from \$15,000 a mile.

PRESIDENT Gifford's part in the opening ceremony consisted of this comment:

I am particularly glad to hear your voice at this moment, Mr. Powley, because it is coming to me over a line which we decided to build three years ago against the possibility of war with Japan. Because of that decision, you and I at this moment have the privilege of opening to regular service the new underground transcontinental cable of the Bell system. Now for the first time in history, a telephone conversation can be carried all the way from coast to coast over telephone cable instead of going part way over open wires strung on cross arms on poles.

* * * *

THE Federal Communications Commission last month approved acquisition by the American Telephone and Telegraph Company of all the assets of the American Telephone and Telegraph of Missouri, a wholly owned subsidiary which has title to pole lines, cable, conduit, rights of way, lands, and buildings in Missouri.

The property was carried on the Missouri company's books at \$12,092,777. The parent company explained that it intended to dissolve the Missouri corporation since it was no longer necessary to

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have it in existence. The transfer of title would mean no change in operation, AT&T said.

* * * *

TELEGRAPH merger legislation much the same as that recommended in the last session of Congress by the House Interstate Commerce Committee will be reintroduced in the new Congress shortly after it assembles. Representative Bulwinkle, Democrat of North Carolina, chairman of the subcommittee which conducted House studies of the measure, recently said he would offer the bill with a change liberalizing the labor protective provisions to cover workers whom the House bill excluded.

The measure must be referred again to the Interstate Commerce Committee but Mr. Bulwinkle said he believed hearings would not be necessary.

Other changes in the bill appeared possible in the light of the fact that the committee recently has lost ten of its twenty-five members through elections and otherwise. Two of these were Republicans and eight Democrats, and one Republican vacancy has been filled. Democrats had a 15-10 majority in the last Congress, which would be pared down to 14-11 or 13-12 for the new session.

* * * *

TELEVISION, which is expected to develop its own great post-war industry, is only one of many new electronic devices that are headed for practical utilization after the war, David Sarnoff, president of the Radio Corporation of America, said last month in his year-end review of radio. Mr. Sarnoff emphasized especially the future rôles in science and industry of micro-waves, radio waves of very short length.

Lieutenant General James G. Harbord, chairman of the board of RCA, told in his year-end statement how radio communications, untried in the World War, now provide an instantaneous and effective network for military and naval operations throughout the world. "And the men and women on the production front," he added, "have given the Ameri-

can armed forces the finest radio equipment in the world." General Harbord stated:

Science, through development of the electron tube, put radio in the fight and made it indispensable to the modern mechanized army, to the air corps, to the fleet, and to the merchant marine.

Mr. Sarnoff, remarking that many of the scientific achievements of 1942 remain military secrets, said that when radio's services to America's armed forces were made known after the war, American citizens would be proud of the achievements of radio research workers and engineers. Television, he said, has played an important rôle in air-raid instructions and civilian defense.

WHILE the present laboratory status of television, he said, was a military secret, he expected it to emerge from the war in such form as to make possible "a great post-war industry." He stated:

Television, however, is not radio's only post-war promise. The useful services of radio will be broadened far beyond the communication field, into such realms as the RCA electron microscope, radio-frequency heating, supersonics, and no end of applications made possible by the development of new radio tubes, especially those designed to send and receive micro-waves—tiny waves measured in centimeters.

The application of radio-frequency heating to speed industrial processes and at the same time increase their efficiency is rapidly coming to the fore.

Radio waves may now be used to heat, dry, glue, stitch, anneal, weld, rivet, and even to deactivate enzymes. This new field is known as thermal radio. It can laminate an airplane propeller in minutes, compared to hours required by ordinary heat and pressure methods.

Radio high-frequency "furnaces" are a post-war prospect. In them railroad ties will be seasoned quickly and "cakes" of textiles dried uniformly. Even rubber may be radio-cemented to wood or plastic; cloth stitched and seamed by radio heat; metals hardened; plywood glued; and fresh vegetables deactivated without loss of flavor or color. The possibilities in this new thermic realm of radio are unlimited, as indicated by remarkable advances in RCA laboratories during the year.

Emphasizing the rôle played by scientific research in all fields of radio achieve-

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ment, Mr. Sarnoff spoke with pride of the new RCA Laboratories near Princeton, New Jersey, which were dedicated late last year, and said that energies and resources of that organization now devoted with single purpose to war objectives would be turned at the war's end "to develop new and useful products and services for the post-war era."

* * * *

THE Board of War Communications discontinued nontelegraph services by the telegraph industry, and forbade the transmission of any domestic felicitation or congratulatory messages (those both originating at and addressed to points within the continental United States). The order was effective December 22nd.

The order did not affect any traffic, including special rate messages, to and from members of the armed forces overseas, or general low-rate arrival and departure messages, known as "tourate" messages.

The nontelegraphic services discontinued included errand, distribution, remittance, instalment payments, and shopping services. All nontelegraphic messenger services are likely to be discontinued except messenger service to telephone companies to call nonsubscribers to the telephone. The sale by telegraphic offices of travelers' checks and mail money orders as well as the acceptance of express packages also has been discontinued.

* * * *

THE Oklahoma Supreme Court on December 18th approved a state corporation commission order for rate reductions and refunds which terminated the historic 11-year-old statewide telephone rate case.

Representing a settlement with the Southwestern Bell Telephone Company, the action carried with it lower charges in 29 communities estimated at \$339,300 annually and refunds to the state and 26 communities totaling \$443,500, of which the state will receive one-tenth.

Court action affirmed an appeal by the

company filed in 1940 from an earlier rate order which was superseded by the amended schedule.

John Cantrell, company attorney, said his firm agreed to accept the order rather than pursue further litigation during the war emergency. It left rates at the remainder of the company's 144 exchanges unchanged, but included these additional revenue reductions besides lower rates:

Elimination of the report charge on uncompleted intrastate toll calls, estimated to save \$55,000 a year.

Elimination of the 15-cent monthly charge still made in some localities on hand-set equipment, due to save \$65,000 a year.

Reduction of the overtime rate on intrastate person-to-person toll calls, estimated at \$90,000 a year.

The lower charges become effective "with the first billing date in the first month beginning after the tenth day following approval by the supreme court."

The order took cognizance of possible future contingencies to be faced by the company after the war by setting up "objective rate schedules" on the basis of its study to indicate where other charges might be made if the company established its right to them.

* * * *

THE Federal Communications Commission *en banc* on December 31st approved the transfer of control of the Yankee Network, Inc., licensee of four standard broadcast stations, four relay stations, two experimental stations, and two high-frequency stations, through the sale of the capital stock of the Winter Street Corporation (which owns 100 per cent control of the Yankee Network), from John Shepard, III, and George R. Blodgett, trustees, to the General Tire & Rubber Company, Akron, Ohio. Commissioners Walker and Durr dissented.

The sum of \$1,240,000 will be paid, plus an additional amount to be determined on the date of the transfer equal to 94 per cent of the aggregate net quick assets of the seller over \$100,000.

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There is also being sold to the General Tire & Rubber Company, as a part of the same transaction, all of the capital stock of the Colonial Network, Inc., which is owned 50 per cent by John Shepard, III, and 50 per cent by his brother, Robert F. Shepard. Colonial is not a licensee of a broadcast station, its income being derived principally from the sale of station time and wired transcription service to subscribers.

In addition to its position of licensee, the Yankee Network, Inc., is engaged in the operation of a network broadcast system employing as outlets the four broadcast stations licensed to it and 17 contract outlets or affiliated stations located in the states of Maine, Massachusetts, Connecticut, New Hampshire, and Vermont.

* * * *

THE RCA Manufacturing Company, wholly owned subsidiary of Radio Corporation of America, consolidated with the parent company, effective December 31st, Colonel David Sarnoff, RCA president, announced recently following a special meeting of the RCA board of directors.

Colonel Sarnoff said the unification of the administrative, research, and manufacturing activities would result in "closer coordination and increased flexibility of operation."

George K. Throckmorton, former chairman of the executive committee of RCA Manufacturing Company, was elected a vice president of Radio Corporation of America.

* * * *

J. C. WILLEVER, seventy-seven, dean of the telegraph industry and first vice president of the Western Union Telegraph Company, has retired on pension, effective January 1st, it was announced recently by A. N. Williams, president.

Because of his service with the company for sixty-two and a half years, Mr. Willever was appointed honorary vice president without official duties, effective January 1st. He will be available to serve

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as a director of Western Union.

Mr. Willever's service is longer than that of any other executive in Western Union's 91-year history. It includes active participation in more functions of management and of the company's affairs generally than any other man. The name of J. C. Willever has appeared on more than 6,000,000 yellow telegraph blanks since 1916.

Edwin F. Chinlund last month resigned as president of Postal Telegraph, Inc., to become associated with R. H. Macy & Co. as a vice president, a member of the executive committee, and a director of the department store company. However, in resigning as president of Postal, Mr. Chinlund will remain temporarily as chairman of the board of the communications concern and will devote his efforts to effecting the proposed merger of the nation's telegraph companies.

Ellery W. Stone, for three years executive vice president of Postal, was named president to succeed Mr. Chinlund. Mr. Stone, it was announced, becomes the chief executive officer of the Postal Telegraph system and will continue as a director and a member of the concern's executive committee.

Mr. Chinlund has been president of Postal Telegraph since 1939. Previously he was a partner in the accounting firm of Arthur Andersen & Co. From 1925 to 1937, Mr. Chinlund was vice president, controller, and a director of International Telephone & Telegraph.

Mr. Stone has had an extensive background in the communications industry.

* * * *

ON the first day of the opening session of the Seventy-eighth Congress, January 6th, Representative Cox, Democrat of Georgia, introduced House Resolution No. 21. This resolution would authorize an investigation of the "organization, personnel, and activities of the Federal Communications Commission." Representative Cox had a similar resolution for investigation in the last session of Congress which was not acted upon at that time.

Financial News and Comment

By OWEN ELY



New Dissolution Plans

REFUSAL of the Supreme Court to reverse the decision of a lower court that Public Service of New Jersey is a subsidiary of United Gas Improvement Company apparently resulted in a revision of policy by some of the large eastern holding companies. United Gas Improvement announced December 20th that it had filed a dissolution plan with the SEC. The plan called for distribution of some of the company's larger investments, together with about \$30,600,000 in cash, to stockholders (with distribution of remaining assets probable at some later date). The \$5 preferred stock would be retired by issuing in exchange three shares of a new \$1 preferred stock of Philadelphia Electric Company, plus \$40 cash. Common stockholders would receive one-third of a share of new common stock of Philadelphia Electric and one-twelfth of a share of Public Service of New Jersey common. The common would also receive any later distribution of remaining assets "which may be desirable and feasible."

On December 30th Niagara Hudson Power disclosed its new plans for corporate simplification and ultimate dissolution. The Niagara plan, not yet published in detail, includes three major steps: (1) consolidation of the principal operating companies together with the intermediate holding company, Buffalo, Niagara & Eastern; (2) consolidation of remaining smaller subsidiaries and investments into a single unit; (3) pro rata distribution of shares in the two new consolidated companies to security holders of Niagara Hudson Power (which will

first be recapitalized on an all-common stock basis, it is understood). The plan would probably eliminate the holding company relationship of United Corporation due to the changes in voting rights, etc. Recent preferred arrears will be paid of as part of the plan.

Federal Water & Gas has also filed a dissolution plan with the SEC.

Utility Rate Increases Not Inflationary—A Strong Plea

AN interesting brief has been filed with the New Jersey Board of Public Utility Commissioners by Clarence H. Dickey, attorney for Commonwealth Water Company (subsidiary of American Water Works), in the matter of the proposed 15 per cent rate increase or surcharge. The company pointed out that in 1936 the board had found them entitled to a return of 6 per cent on the rate base, and that such a return had not been realized in any single subsequent year. The company felt that 6 per cent was still a reasonable return for while longer-term interest rates have declined slightly since 1936, an important offsetting factor was the 23 per cent rise in the general price level, greatly increasing the cost of construction. The brief also stated:

With full regard for all the duties and obligations of this petitioner in a war emergency, we submit that:

(A) An increase in rates, as requested, is not inflationary;

(B) Public service corporations are the traditional victims of inflationary rises in the general price level;

(C) Regulatory bodies must have a

PUBLIC UTILITIES FORTNIGHTLY

special concern for public service corporations under inflationary conditions in order to preserve their financial integrity and operating efficiency;

(D) It is the duty of Congress, and of Congress alone, to determine what share of the war's financial burdens should be carried by this petitioner;

(E) The anti-inflation law of October 2, 1942, does not in any way suspend the general law of utility regulation, or alter the principles and facts upon which this board formulates its decisions.

In support of the contention that an increase in rates would not be inflationary, the brief pointed out that "money creates inflation only when it is spent. Any increase in petitioner's income would not induce the petitioner to spend more than is required by its existing obligations and its operating needs. . . . This income . . . would only serve to protect the petitioner's outstanding obligations and to preserve its financial integrity against the continuing impact of higher costs beyond its control."

IN support of point "B," the brief pointed out that the Dow-Jones average of 15 utility stocks declined from 35.32 in October, 1936, to 10.58 in April, 1942, continuing:

This is the bloodless verdict of the market place, and it is a warning that cannot be lightly disregarded by those who are concerned with the health of an industry that represents one of the nation's greatest assets. . . . The petitioner is being squeezed between rising costs and fixed rates. If the inflationary spiral is to be slowed down and finally halted, the controls must be applied not at the top, but at the base where the inflationary movement gains its initial impulse. The base is wages and prices of raw materials.

The brief pointed out that the War Labor Board had fixed a policy of permitting wage increases to cover the 15 per cent increase in living costs since January, 1941, and contended that, based on the same principle, utilities are entitled to compensation for their higher costs of operation. It also pointed out that "utility investors are people just as much as consumers" and that it is unfair to throw the entire cost of the war on any one group.

With respect to point "C," the board was reminded that the ICC has protected the railroads by granting rate increases, despite the prospects of larger traffic and higher net earnings, and that it rejected the OPA's attack on the rate increase.

REGARDING point "E," the brief stated that six weeks after the anti-inflation act was signed the public utilities commission of the District of Columbia approved (against a petition by the OPA) a rate increase granted to Washington Gas Light Company, and this was also supported three days later by the decision of the Federal District Court for the District of Columbia. Another decision was also handed down by the court, sustaining a bus fare increase by a local traction company.

Regarding rate of return, the brief stated:

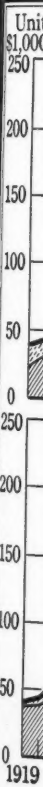
A careful record of the cases which have appeared in the *Public Utilities Reports and FORTNIGHTLY*, from 1936 to date, shows that the rate of return allowed by commission generally over the country, for water and other utilities, has ranged from 6 to 7 per cent. In a few instances the rate of return has been higher than 7 per cent, but rarely, if ever, has it dropped below 6 per cent. For the information of the board there is attached to this brief, as Appendix C, a table showing the name of the case, the court or commission before which the proceedings were had, the date of the decision, where the citation appears in *PUR*, the type of utility, and the rate of return.

It was also pointed out that the public utilities commission of the District of Columbia recently permitted Washington Gas Light to continue (in effect) a sliding-scale arrangement providing for a return of 6½ per cent.

The brief also discusses at some length the question of "prudent investment" as a rate base.

It is refreshing to find such a frank and forceful discussion of the utility point of view. The utilities have done such a splendid war-time job (despite being "pushed around" in so many high quarters), that such a logical presentation of their rights merits the most careful attention and discussion.

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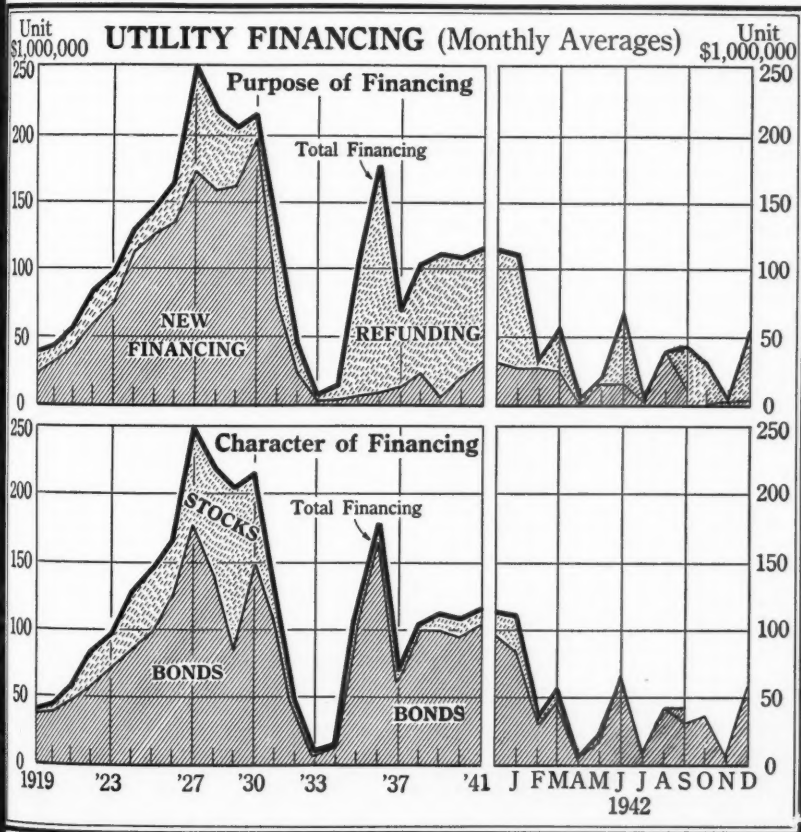
FINANCIAL NEWS AND COMMENT

1942 Utility Financing Lowest Since 1934

WHILE utility financing in December amounted to some \$62,000,000, the monthly average for the year was only about \$40,000,000. (See accompanying chart.) This is the smallest average in the past two decades with the exception of the two years 1933-34. It is only about 36 per cent of the previous year's total. New financing, which amounted to about \$14,000,000 per month in 1942, did not decline quite as much as did refunding operations. Stock issues in 1942 amounted to only about

\$49,000,000, or an average of about \$4,000,000 monthly—most of this amount representing new capital.

New financing "on the fire" for 1943 includes the \$20,900,000 West Texas Utilities financing (before the SEC for over a year), \$24,500,000 New Hampshire Public Service bonds and notes, and a \$60,000,000 Puget Sound Power & Light bond issue. The status of the Texas issue remains indefinite, but the New Hampshire bonds (3½s maturing 1973) may come up for competitive bidding late this month, it is thought. The Puget Sound issue is expected to come out of registration around January 21st,



Source: Commercial and Financial Chronicle

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with a formal invitation for bids shortly thereafter. Groups which are expected to seek the big Puget Sound offering include one headed by Stone & Webster and Blodgett, and another headed jointly by Halsey, Stuart and Lehman Bros.

A considerable amount of refunding operations might well be carried out in 1943, if general conditions permit, but requirements for new capital seem likely to be lower than in 1942. According to *The Wall Street Journal's* estimate, utility construction last year (electric companies only) amounted to about \$482,000,000 compared with \$622,000,000 originally budgeted, while indicated expenditures for 1943 are around \$250,000,000. This amount could easily be handled out of depreciation, net income, etc., without recourse to much new refinancing, judging from the trend in recent years.

Kansas City Public Service Company

(Ninth in a series of brief articles on transit companies.)

KANSAS City Public Service Company was incorporated in 1925, taking over a predecessor company. Another reorganization was consummated July 1, 1937, under 77-B, the first mortgage bonds, preferred stock, and common stock being replaced by \$14,887,200 new first mortgage bonds and 346,518,000 shares of common stock. Still another readjustment occurred in 1939, holders of \$12,043,800 bonds receiving 30 per cent of their principal in cash and 70 per cent in new \$3.50 preferred stock. (As of December 31, 1941, \$1,067,700 bonds still remained outstanding.) Cash for payment to depositing bondholders was obtained from the RFC, which accepted bonds as collateral.

As of September 30, 1942, the debt to the RFC amounted to \$3,829,209 and there were also equipment notes payable of \$105,000, both items showing a reduc-

tion from the previous year. The company's current position at that date showed only a slight excess of current assets over current liabilities, but reflected a considerable improvement over the previous year, cash being over 2½ times as large.

The company's bonds are currently quoted around 79. The \$3.50 preferred stock (108,121 shares) is selling at about 15, and the common (343,762 shares) around 1½. Earnings in recent years have been very irregular. Gross income increased from about \$83,000 in 1935 to \$402,000 the following year, but during the three years 1938-40 the company failed to cover operating expenses. In 1941 total income was \$131,000, equivalent to about 40 per cent of fixed charges, but in the eleven months ended November 30th charges were covered 6.94 times, while \$6.64 was earned on the preferred stock and \$1.08 on the common. This changed financial picture was, of course, due to sharply increased business. Gross for the period showed an increase of 34 per cent over 1941, while expenses increased only 9 per cent.

IT is reported that the company has excellent labor relationships, employees participating in net income. The company's present prosperity, if it continues another year or so, should enable it to retire a substantial part of the RFC loan, payments against which are being made monthly out of depreciation and net income.

The management is understood to be under RFC supervision. Powell C. Groner, president of the company, was elected president of the American Transit Association in 1942.

A modernization program has been in progress, and the company purchased a considerable amount of new equipment in 1941-42. About \$12,000,000 was expended for improvements during 1926-41, together with \$17,000,000 for maintenance. Equipment now includes 412 motorized passenger cars, 86 trolley busses, 260 motor busses, 68 work freight, and service cars, etc.

This unit in the transit industry is

FINANCIAL NEWS AND COMMENT

now making rapid progress in cleaning up its financial picture, and with another year of prosperity should be able to further reduce fixed charges, improve its working capital, and thus fortify its position for the post-war period.

Stockholders' Proportion of Revenue Dollar Continues To Shrink

ACCURATE figures for 1942 are not yet available, but revenues of the electric companies are expected to top 1941 by about 8 per cent, reaching a new peak around \$2,680,000,000, while net income is expected to shrink about 10 per cent. Since net income measures the amount available both for preferred and common stockholders, the shrinkage in the balance for common stockholders will, of course, exceed 10 per cent. Some of the percentages of decline shown in our table (page 106) will doubtless be improved as later figures become available, since many of these companies in their earlier interim reports accrued income taxes on a 45 per cent basis and did not enjoy tax advantages contained in the final tax bill.

Thus Public Service of New Jersey, which reported a slight deficit on the common stock in July, earned 11 cents a share in October and 13 cents in November. Detroit Edison, on the other hand, made a poorer showing in November than in previous months, since the company apparently had not fully adjusted its earlier tax figures to the 1942 act.

In 1929 about 27 cents out of the revenue dollar was available for preferred and common stockholders while in 1942 the figure apparently dropped to about 13½ cents, or approximately one-half. The shrinkage for the common stockholder might be in the neighborhood of 70-80 per cent. Is it any wonder that common stock financing by electric utilities, though admittedly desirable, has become almost an obsolete practice, as it has with the railroads? How much more can the utility common stockholder

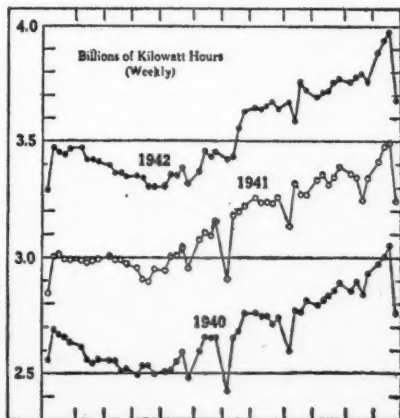
be "squeezed" before he becomes an extinct relic of the capitalist system?

SEC Clarifies Regulations On Reserves Data

AN opinion indicating the disclosure to be made in financial statements, with respect to reserves established to provide for possible losses and other contingencies arising out of existing war-time conditions, was given early this month by William W. Werntz, chief accountant for the Securities and Exchange Commission.

Mr. Werntz said that careful consideration must be given to the need for establishing appropriate reserves intended to provide for final settlement of war production contracts, for post-war adjustments, and for other possible losses or adjustments resulting from existing conditions. He pointed out, however, that Regulation S-X in financial statements filed with the commission requires a "full and accurate disclosure" of all reserves established and their purposes. "Particular attention is directed to the fact that the requirements of Regulation S-X are to be considered minimum requirements . . ." he stated.

ELECTRICITY PRODUCTION



The Wall Street Journal

PUBLIC UTILITIES FORTNIGHTLY

INTERIM EARNINGS REPORTS

	End of Periods	12-month Period			3-month Period		
		Last	Prev.	Inc. %	Last	Prev.	Inc. %
<i>Electric-gas Holding Companies</i>							
American Gas & Elec. <i>Consol.</i>	Oct.	\$2.16	\$2.90	D25	..	..	..
Amer. Power & Lt. (pfd.) <i>Consol.</i> ...	Oct.	5.54	5.56	..	..	..	..
<i>Parent Co.</i>	June	2.98	4.72	D37	\$.43	\$1.23	D65
American Water Works <i>Consol.</i>	Sept.	.74	1.16	D36	..	..	..
<i>Parent Co.</i>	Sept.	.21	.49	D57	..	..	..
Cities Service P. & L. (pfd.) <i>Consol.</i> Mar.(a)	4.40	5.76	D24	..	..	..	..
<i>Parent Co.</i>	Dec.	16.56	27.70	D40	..	..	..
Columbia Gas & Elec. (1st pfd.) <i>Consol.</i> Sept.	7.73	11.28	D32	2.01	D.10	..	..
Commonwealth Edison <i>Consol.</i>	Sept.	1.88	2.14	D12	..	..	..
Com. & Southern (pfd.) <i>Consol.</i>	Oct.	6.86	8.14	D16	1.58	2.01	D21
Elec. Bond & Share (pfd.) <i>Parent Co.</i> Sept.	4.52	7.47	D39	.99	1.47	..	..
Elec. Power & Lt. (1st pfd.) <i>Consol.</i> Oct.	14.10	11.73	20	..	..	..	..
<i>Parent Co.</i>	Oct.	1.38	1.63	D15	..	..	..
Engineers Public Service <i>Consol.</i>	Oct.	.97	1.26	D23	..	..	..
<i>Parent Co.</i>	Sept.	D.06	.64	..	..	..	..
Federal Light & Traction <i>Consol.</i> ...	Sept.	1.23	1.66	D26	.27	.38	D29
Long Island Lighting (pfd.) <i>Consol.</i> Sept.	4.46	5.29	D15	1.49	2.04	..	..
<i>Parent Co.</i>	Sept.	6.24	6.14	2	1.68	1.62	..
Middle West Corp. <i>Consol.</i>	Sept.(b)	.96	.78	24	.41	.37	..
<i>Parent Co.</i>	Sept.(b)	.27	.36	D25	.07	.08	D13
National Power & Light <i>Consol.</i>	Aug.	.56	1.27	D56	.10	.23	D56
<i>Parent Co.</i>	Aug.	.10	.48	D79	..	..	..
Niagara Hudson Power Co. <i>Consol.</i> ..	Sept.	.46	.69	D33	D.02	.05	..
North American Co. <i>Consol.</i>	Sept.	1.81	1.79	1	.40	.46	D13
<i>Parent Co.</i>	Sept.	1.48	1.58	D6	..	..	..
Nor. States Pwr. (Del.) (pfd.)	Sept.	6.60	7.54	D13	D.03	1.43	..
<i>Consol.</i>	June(c)	.03	.02	..	..	..	..
Ogden Corp.	Nov.	1.42	2.02	D30	..	..	..
Public Serv. Corp. of N. J. <i>Consol.</i> ..	Dec.	10.50	7.71	36	3.09	D.07	..
Stand. Gas & Elec. (pr. pfd.) <i>Consol.</i> Dec.	2.12	1.94	10	..	..	..	..
<i>Parent Co.</i>	Dec.	2.12	1.94	10	..	..	..
United Gas Improvement <i>Consol.</i>	Sept.	.60	.87	D31	.13	.15	D13
<i>Parent Co.</i>	Sept.	.50	.82	D39	..	..	..
United Lt. & Power (pfd.) <i>Consol.</i> ..	Dec.	6.89	8.78	D21	..	..	..
<i>Parent Co.</i>	Dec.	1.55	3.94	D61	..	..	..
<i>Electric-gas Operating Companies</i>							
Boston Edison	Sept.	2.15	2.28	D6	.54	.43	26
Conn. Lt. & Power	Nov.	2.53	2.93	D14	..	..	..
Consolidated Edison, N. Y. <i>Consol.</i> ...	Sept.	1.54	2.08	D26	D.01	.14	..
<i>Parent Co.</i>	Sept.	1.45	2.11	D31	.11	.36	D69
Cons. Gas of Baltimore <i>Consol.</i>	Sept.	4.29	4.34	D2	.78	.98	D20
Detroit Edison <i>Consol.</i>	Nov.	1.31	1.98	D34	..	..	..
Indianapolis P. & L. <i>Consol.</i>	Sept.	2.04	2.77	D27	..	..	..
Pacific Gas & Electric <i>Consol.</i>	Sept.	2.12	2.20	D4	..	..	..
Public Service of Ind.	Nov.	1.76	2.17	D19	..	..	..
Southern California Edison	Sept.	1.84	2.30	D20	.55	.73	D25
<i>Gas Companies</i>							
American Lt. & Traction <i>Consol.</i>	Sept.	1.85	1.89	D2	..	..	..
Brooklyn Union Gas	Sept.	1.76	2.09	D16	D.01	D.11	..
El Paso Natural Gas <i>Consol.</i>	Oct.	3.57	3.36	6	..	..	..
Lone Star Gas <i>Consol.</i>	Sept.	.91	1.29	D29	..	..	..
Oklahoma Natural Gas	Oct.	3.72	3.33	12	..	..	..
Pacific Lighting <i>Consol.</i>	Sept.	3.63	3.37	8	..	..	..
Peoples Gas Light & Coke <i>Consol.</i> ...	Sept.	6.06	5.82	4	1.14	.81	41
Southern Natural Gas <i>Consol.</i>	Sept.	1.70	2.23	D24	..	..	..
United Gas Corp. (1st pfd.) <i>Consol.</i> Oct.	18.61	12.97	43	..	..	..	..
<i>Parent Co.</i>	Sept.	14.60	8.30	76	1.94	1.00	94
<i>Telephone and Telegraph Companies</i>							
American Tel. & Tel. <i>Consol.</i>	Aug.	10.63	11.06	D4	2.73	2.52	8
<i>Parent Co.</i>	Sept.	9.54	10.53	D9	2.34	2.54	D8
General Telephone <i>Consol.</i>	Sept.	2.64	2.74	D4	..	..	..
Western Union Tel.	Oct.(d)	7.13	5.58	26	..	..	..

D—Deficit or decrease. (a) Three months. (b) Nine months. (c) Six months. (d) Ten months.



What Others Think

Electric Power Records in World Wars I and II



THE stability and resourcefulness of the electric power industry are indicated by the year-end statement recently issued by President C. W. Kellogg of the Edison Electric Institute. All demands for electricity for munitions and armaments for the armed forces were successfully met in 1942 in every section of the nation. The requirements for civilian use have been covered without resort to curtailment or rationing. The margin of reserve for the country as a whole has actually increased over last year's levels.

Such is the outstanding record of the power industry in the United States during the war year of 1942. Details of this record have been generally made available in the trade press prior to this writing. However, one significant fact—and it is indubitably a fact in terms of actual past performance—brought out by President Kellogg's statement did not perhaps receive the emphasis it deserves. That is the practical approach of the industry in fulfilling demands which were consistently overestimated by theoretical observers, including government officials.

For example, in discussing the margin of increased reserves in 1942, Mr. Kellogg noted that the sum of noncoincident peak loads at generating stations for December, 1942, was estimated at 37,000,000 kilowatts. This is about 5 per cent higher than last year (December, 1941) but it is about 10,000,000 kilowatts below the total installed capacity of these generating stations. The reserve margin in 1941 was only 9,000,000 kilowatts, leaving a net increase in reserve capacity during the year of 1,000,000 kilowatts.

THE Kellogg statement outlines a number of reasons for this perhaps unexpectedly efficient performance of

the industry which he represents. He stated:

For the group of larger . . . utilities reporting to the institute, the sum of the noncoincident peak loads for December is estimated to have been 33,000,000 kilowatts as compared with approximately 31,500,000 kilowatts in 1941. This figure of 33,000,000 kilowatts for these larger systems is 8 per cent below the estimates made by them a year ago, and is nearly 20 per cent below the forecast of the Federal Power Commission of a year and a half ago. Daylight saving time introduced in February of this year [1942] affected these earlier estimates by about a million kilowatts, or 3 per cent of the total. Other factors in the overestimates made a year ago were insufficient allowance for decrease in the nondefense industrial load and the failure of war loads to materialize as rapidly and as much as had been anticipated.

Perhaps one reason why some estimates of power demand have been on the high side is the tendency to relate the trend of power demand to the projected trend of war production or war expenditures. The chart on page 109 shows the grave fallacy of any such rule-of-thumb formula.

What about 1943? We must keep in mind, of course, the recently announced policy of the Federal government to restrict all types of construction to enterprises capable of early completion. Thus about 2,800,000 kilowatts of prospective power installation were ordered canceled by the WPB in 1942. The bulk of this cut affects generating equipment scheduled for 1944 and 1945.

The total net increase in generating capacity scheduled for 1943 is, according to the Kellogg statement, 3,384,000 kilowatts, with 521,000 for 1944 and 195,000 for 1945, making a total during the next three years of 4,000,000 kilowatts.

Will this be enough? It would be a

PUBLIC UTILITIES FORTNIGHTLY

reckless prophet, indeed, who would dare the unknown to such an extent as to say that throughout the entire three years ahead of us, an increase of 4,000,000-kilowatt capacity would be sufficient for any possible development affecting the nation's power demand. But we do know that, on the basis of general war production plans now in fairly clear prospect, 1943 is expected to mark the peak of our war production.

CONFINING our outlook to this one year of 1943 it is, therefore, quite possible to make an intelligent appraisal of the electric power requirements for that year. Mr. Kellogg's statement says on this point:

In view of existing margins of reserves in generating capacity and scheduled additions to this capacity in 1943, it now appears that in every sector of the country there will be ample generating capacity to serve the peak demands reasonably to be expected. This takes into account existing trends in power demands and all the new demands for power that are in sight for this year or can be anticipated at this time. No power shortage is on the horizon for 1943, when America's war effort is expected to be at its peak.

And what of the cost of electricity? The Kellogg statement gives us some interesting figures on this phase:

Compared with September, 1939, when hostilities in Europe began, the individual items of the cost of living, as shown by the U. S. Department of Labor, have shown the following changes:

Food	+35%
Clothing	+25%
House furnishings	+21%
Rent	+3%
Fuel and ice	+18%
Entire cost of living	+19%
Electricity	-2%

The price of electricity has continued its steady decrease, the composite average for all domestic use having declined from 4.04 cents per kilowatt hour for the twelve months ending with September, 1939, to 3.68 cents for September, 1942.

The Kellogg statement shows that the industry has a record amount of coal fuel on hand and the water storage outlook for hydro is presently favorable.

In sharp contrast to this relatively reassuring appraisal of the nation's

power supply during the current World War is the picture painted, in an interesting article recently released by the United States Bureau of Labor Statistics, of power supply in World War I. The title of this pamphlet (Historical Study No. 54) is "Electric Power in Wartime, 1917-1918," by Calman Winegarten. This report is a brief statement of Federal administration of the first World War power problems in three of its aspects:

1. Preferential distribution of electric power under shortage conditions
2. Curtailment of nonessential consumption.
3. Reduction of critical peak loads

(It does not go into such phases as interconnection, industrial expansion, financing, rates, etc.)

THE Winegarten report noted that the United States entered World War I confident of an adequate supply of electric power. After a few months of war, however, expansion of the power industry was checked by inability to obtain equipment, much of which had been hastily diverted to armed services, and also by the dearth of new capital. The latter problem was particularly acute because utilities were unable to attract capital in a period of rising costs by reason of their fixed rates.

Two unforeseen factors further complicated the situation. First of all, there was a coal shortage due to lack of storage facilities and transport; second, a severe drought limited hydroelectric production.

Late in 1917 the expanding requirements of war industry created a series of local power shortages which mounted in number and intensity throughout the war.

The simplest and most direct remedies were found to be (a) diverting power from nonessential use; (b) curtailing nonessential use; (c) reducing power loads. While these techniques were more palliative than constructive they could be applied rapidly without expenditure of money or material.

WHAT OTHERS THINK

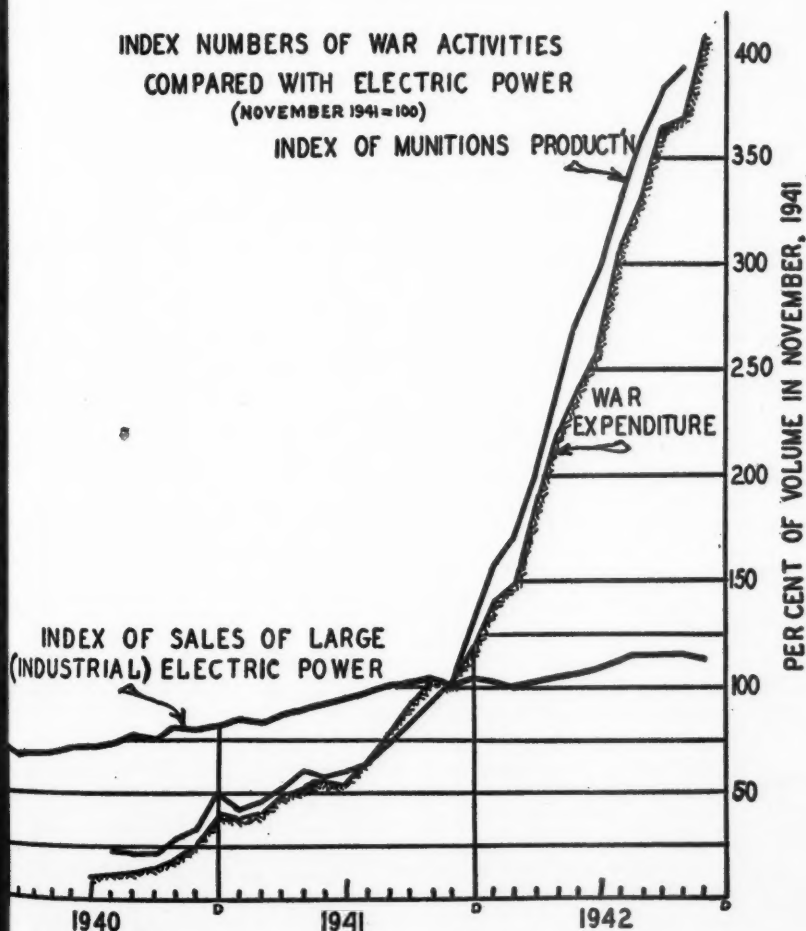
THE first shortage developed in the Niagara Falls area. Late in December of 1917 the Secretary of War requisitioned the entire output of the two Niagara companies. At the same time the government waived delivery upon agreement of the two companies to distribute their output according to War Department instructions. Accompanying these waiver agreements were detailed instructions for the allocation of power which

had to be changed constantly with passing developments.

In other areas the priorities division of the War Industries Board directed similar programs of power distribution without formal requisitioning. Some difficulty was experienced as the result of war plants being set up without geographical consideration for power shortage areas. This was brought under control through the year 1918 by the power



INDEX NUMBERS OF WAR ACTIVITIES COMPARED WITH ELECTRIC POWER (NOVEMBER 1941 = 100)



Edison Electric Institute

PUBLIC UTILITIES FORTNIGHTLY

section of the War Industries Board.

Rotation was found to be an early and relatively unsatisfactory procedure for ameliorating local power shortages. It was applied in Pittsburgh and New Jersey and consisted of reducing nonessential consumption and cutting off supply to industrial users on a rotating basis.

Formal priorities were not invoked until September 3, 1918, when the War Industries Board issued its Preference List No. 2, providing an official and specific classification of industry for purposes of war distribution. This list set up four classes. Class I included those industries most essential to the war effort, as well as small consumers (having a connected load of 100 horsepower or less). Classes II, III, and IV embraced larger users in the order of diminishing importance of their activity to the war effort.

This system of power priorities was not universally applied. It simply set a pattern which was actually applied to New Jersey, Baltimore, Philadelphia, and Pittsburgh areas. Under this formula where power supply was not sufficient to meet all demands, Class I received 100 per cent while Classes II, III, and IV received a proportion of their demands in the respective ratios of 5, 3, and 2. The Calman Winegarden report states that this system "operated satisfactorily and with a minimum of inconvenience to war industry."

CURTAILMENT of nonessential consumption was carried on chiefly by the United States Fuel Administration under the specific direction of its power and light section. While this was a by-product of the government's fuel conservation program, it did assist indirectly in the correction of power deficiency. The technique consisted chiefly of so-called "lightless nights," the establishment of "daylight saving" time on March 31st, and the curtailment of much unnecessary electric power use, principally in the lighting field, even though such conservation did not necessarily affect the peak demand.

Hotels agreed to cut down lobby light-

ing by a third, merchants and theater operators cut down display lighting, the wattage power of lamps was examined and incandescent lighting was encouraged at the expense of the old inefficient carbon lamps and arc lamps. Street railways established the "skip stop" system, and a number of suggestions were made to industrial plants, even to the extent of a recommendation for washing dirty windows so as to make more effective use of daylight.

As for the reduction of power peaks, the establishment of daylight saving time, according to the Winegarden report, "in actuality constituted one of the most effective measures of the entire war-time power program." An investigation in 16 large cities revealed typical reductions of from 10 to 15 per cent in peak loads. Other power load controls included the staggering of work hours, lunch hours, school hours, and so forth along lines which have already become familiar in World War II.

It is interesting to note that the staggered hour system was established in the fall of 1938 in the Pittsburgh district primarily to take care of an acute shortage resulting from breakdown in a 10,000-kilowatt unit. Transportation services presumably were helped by this in 1918. Today, staggered hours have been put into effect primarily to assist the transportation shortage in many large cities. This time, the effect on the power supply situation is a mere by-product.

IN summing up, the Calman Winegarden report concedes that the electric power industry is in a much better position to carry its load in World War II than it was in World War I. However, the report submits that "techniques applicable in the last war retain their former utility in this respect." Among the "highly favorable developments" tending to mitigate possible power emergencies in World War II, the report mentions "the advanced state of the power industry (in engineering practice, administration, and intraindustry coöperation) as opposed to its comparative infancy in 1917-1918." Also mentioned in this re-

WHAT OTHERS THINK

spect is the contralization of Federal power regulation and the "widespread

and acute awareness of the possibility of power shortage, and its dangers."

Troubles of the Meterman

A HUMOROUS little piece recently published in the *Philadelphia Record* reveals to us the fact that only about one in one hundred adults—and not in the utility business themselves—are able to read an ordinary gas meter. The *Record* claims as its authority the Philadelphia Gas Works. It goes further and says that only one in a thousand makes a practice of reading it regularly and correctly. But a great many more try it with less fortunate results. The *Record* continues:

It may surprise you to know that the gas company honestly wishes you would read it.

Folks who read their gas meters regularly, the company says, know just where they stand from week to week and can regulate their gas consumption accordingly.

Incidentally, there's nobody who wishes Mr. and Mrs. John Q. Public would familiarize themselves with meter reading quite as fervently as the company's official monthly meter reader—that long-suffering, much abused, misunderstood mortal known to millions simply as the Gas Man.

The troubles of the average meter reader are then set forth with a sidelight on the technique employed by this long-suffering race. The *Record* states:

Because he knows his welcome at the average home will be a chilly one, the Gas Man does everything in his power to pave the rocky road he travels. Before he knocks at a householder's door he consults his route book. His predecessor on the route may have left notes:

"Don't jump over the porch railing, she hates it."

"Look out for the dog in cellar."

"Don't slam the door, her husband sleeps days."

"Don't cut across the grass."

"Don't yell GAS MAN, it makes her mad."

Once inside, he turns on his trusty flashlight. The cellar will be dark as a pocket. Many families are bulb-snatchers, and they'll "get another bulb for the cellar tomorrow."

At the top of the cellar stairs, the lady of the house is waiting for him. "What's the damage? It can't be! Why Junior

read the meter and he said it wasn't half that." (Unfortunately, Junior doesn't know that the center dial has to be read counterclockwise and two zeros added to the total.)

"And I hardly touched the gas range. We ate out practically all the time." (She doesn't know that the minute she steps out of the house, Grandpa makes a bee line for the kitchen, draws up a rocker, lights the oven, and sticks his feet in it while he relaxes with old numbers of the *Saugerties Gazette*.)

"It's an outrage," she says, and "she's going right down and look for herself." The Gas Man goes down with her.

"Look," she says triumphantly, "the meter is turning. And I haven't got a burner turned on."

The Gas Man reminds her of the pilot light on the stove, the pilot light on the continuous hot water heater, the gas-operated refrigerator.

"Oh," she says. But she still doesn't see how she could have used all that gas. (She doesn't know that when Father shaves he always leaves the hot water running. It's a whole lot simpler than turning the faucet on and off.)

And the Gas Man can't tell her. He knows how much gas she used, but he doesn't know how or why she used it. "Wipe your shoes next time before you come into my clean kitchen," she calls after him as he goes down the steps. He adds "Wipe shoes" to his notes.

DUE to the shortage of man power, the Philadelphia gas company last February adopted the expediency of estimating certain bills of the general service consumer. This is done, however, only where the company has at least three months' experience on a consumer; when the meter reader is unable to get in to read the meter; or when the scarcity of readers leaves no other course open.

For the general information of Mr. John Q., no more than two bills are estimated in successive months for any one consumer. Further, there is no estimated billing on house-heating consumers, or where the monthly consumption exceeds 20,000 cubic feet of gas.

Will Federal Control over the Power Industry Increase with War's End?

A VOLUME recently released by the American Council on Public Affairs predicts increasing government control over the electric utility industry in the *post bellum* period. The volume is entitled "The Federal Power Commission and State Utility Regulation." Its author is Robert D. Baum, formerly a Fellow at Brookings Institution.

Dr. Baum places his principal emphasis on the possibilities of coordinating and interconnecting power systems, necessitating a common carrier statute for all transmission and, possibly, distribution lines. This would be a regional grid similar in some respects to those now extant in southern California and Great Britain. Nevertheless, the author believes that there is a continuing and permanent place for state control over local power distribution.

Aside from its forecast of intensive Federal planning (which may be debatable in some respects), Dr. Baum's book is a worth-while outline of the background and growth of the Federal Power Commission, with special stress on its relationship with state commissions.

Chapter I, entitled "Federalism and the Federal Power Commission," is chiefly historical and traces the evolution of the FPC from a part-time board of three Cabinet officers set up under the Federal Water Power Act of 1920 to the establishment of the full-time commission in 1935. Chapter II, entitled "Jurisdictional Disputes," goes into the past differences between the FPC and the states, between the state commissions and utilities, and between the FPC and utilities. This naturally covers within its scope the New River decision of 1940 (*United States v. Appalachian Electric Power Co.* 36 PUR(NS) 129, 311 US 377).

CHAPTER III is exclusively devoted to water-power control; Chapter IV, to the control of accounting. It is under

this chapter that Dr. Baum commends the establishment of uniform accounting practice since 1935 and the shift in the policy of the National Association of Railroad and Utilities Commissioners from a critical to a more conciliatory attitude. He concludes in this chapter in part as follows:

The successful consummation of the 1936 system was the product of different times and personalities. In the interim period between 1922 and 1936 the defective character of state regulation was the subject of much public discussion. State commissions stood more on the defensive than ever before. The industry itself began to call for changes in accounting. The more progressive state commissions broke away from the old NARUC form. The Power Act of 1935 was passed, providing for closer Federal-state relations and threatening to subject a large part of the industry to two different accounting systems. The NARUC itself assumed a more conciliatory attitude. A uniform system was agreed upon. There followed a scheme for maintaining uniformity, uniform report forms, rules for preservation of records, and list of retirement units.

The Federal Power Commission launched an intensive program affecting the states; it included original cost investigations, joint hearings, compilation and publication of data, special investigations to assist state regulation, loan of experts, exchange of information, and other types of informal contacts noted above. The foundation for more effective regulation is being laid. Its effects are to be seen in the commission's control of rates and other corporate activities, described in the chapters which follow.

Chapter V, entitled "Control of Rates," includes a discussion of the FPC's activity in promoting a revolt against the reproduction cost valuation procedure authorized by the Supreme Court since *Smyth v. Ames* (1898) and its insistence on original cost procedure, which has not yet been entirely confirmed by the highest court of the land. The activity of the commission in investigating and publishing comparative gas and electric rates of different communities throughout the United States is also noted.

WHAT OTHERS THINK



"REPORT THAT ENEMY IS DROPPING HONORABLE PRIZE-WINNING
AMERICAN GAS COMPANY COOKING RECIPES AND DEMORALIZING
OUR TROOPS WITH THE PICTURES"

Chapter VI, on "Control of Intercorporate Relations," ends on a note complaining of jurisdictional remedies in that respect. The final chapter, on Effectiveness of Collaboration," brings forth the author's more speculative conclusions. Dr. Baum holds that "the growth of large-scale generating sources, long-distance transmission line, . . . point to the likelihood that Federal control in the post-war period will be more significant than before the war."

IN his opinion, however, state control of local power distribution will and should remain since the past experience of the Federal Power Commission indi-

cates that "through continued and even increased intergovernmental collaboration lies the path toward the solution of many regulatory problems."

In reviewing the relations of the FPC with state agencies, Dr. Baum urges elimination of duplication and overlapping functions, "a wasteful drain." In considering the problems with regard to applications for merger and disposition of property, Dr. Baum states that the situation does not warrant any legislation exempting intrastate merger transactions from FPC control.

It is his opinion, however, that Congress eventually might find it desirable to strengthen the commission's peace-

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time authority over interconnections and interchange of power and to vest in it authority to approve extensions and abandonments. Dr. Baum also urges greater uniformity as between Federal and state commissions in connection with rules of practice and procedure. He suggests that the state commissions could more whole-heartedly abide by the terms of the cooperative agreement of the National Association of Railroad and Utilities Commissioners in notifying the FPC of any proceedings likely to be of interest to that body.

IN Dr. Baum's view it is "a grave necessity during war time for the states to assume "a more active responsibility" for working closely with the FPC. In this connection, he declares that "the full extent of the jurisdiction of the FPC is not yet fully settled by the courts, but it is clear that the commission can exert considerable influence on utility regulation throughout the nation."

In general tone, Dr. Baum's work is scholarly and temperate. Yet, it is obvious that he is considerably overawed by what he believes to be the mission of the FPC. A careful examination of his volume fails to bring out any critical approach whatever to its work in the past. His explanation, for example, of the Ot-

tertail Case (page 208), 33 PUR(NS) 257, in which the FPC (Commissioner Manly dissenting) arbitrarily ordered a supplying power company to establish the lowest of several rates to distributing utilities, without any determination of reasonableness *per se*, is neither enlightening nor convincing.

He fails to touch on the inconsistency of the FPC's promulgating rate comparisons on one hand and refusing to admit them when the evidence would seem to be in favor of a power company in a rate case—as happened in the recent hearings of the Southwest power pool. Dr. Baum carefully refrains from touching upon the public ownership attitude indirectly espoused by FPC personnel in recent years, nor its questionable statistical record during the war years as a prophet of power shortage. The announcement by the FPC, for example, early in 1942 that a continuation of original cost investigation of utilities was necessary in helping to win the war raises some question as to whether this admittedly powerful regulatory arm of the Federal government has invariably been as practical as it might be.

THE FEDERAL POWER COMMISSION AND STATE UTILITY REGULATION. By Robert D. Baum. American Council on Public Affairs, Washington, D. C. 1942. Price \$3.

Railroad Men Rank High In War-time Britain

UNDER the title, "Our Engines and Our Men," Toram Beg, described by the London office of the International Transport Workers Federation as an active British railway trade unionist and a recognized writer on British labor affairs, has written a special article with the object of giving Americans and Canadians an idea of war-time conditions on the railroads of Great Britain. It runs in part as follows:

As trade unionists, we railwaymen stand pretty near the top of things here. With the possible exception of the miners, we have hammered and slogged to improve our con-

ditions with more effect than the generality of craft unions in Britain. We are working under a scheme of negotiating machinery which eliminates practically every aspect of unjust dealing. Our rates of pay were, prior to the war, something like \$2 or \$3 a week higher when compared with those of other mechanics.

Our rates of pay will no doubt seem miserably small when compared with American rates, but let us get them into proper perspective. I draw a basic rate of approximately \$25 for a 48-hour week; my fireman gets about \$20. These are the maximum rates for drivers and firemen throughout Britain.

I can buy a decent suit of clothes for a week's pay. My fireman can rent a good

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house at about \$3 a week. If we wanted to get uppish, we could, before the war, purchase a decent little house for about \$2,000. If the job takes you away from home and you have to board with another family, it costs you about \$7 a week. This brief outline will, I hope, give you a fairly accurate idea on which to compare our economic standards.

We have a guaranteed work day and week. That is, we must be employed when we present ourselves for duty every work day. No overtime can be carried forward to make up the 48-hour week, and no leave may be given in lieu of overtime worked. Sunday duty is also paid for at the rate of time and a half.

ACCORDING to Mr. Beg, promotion is on a strict seniority basis; there is no special payment for any class of work, except that the man on the long trip (passengers) has a mileage base of payment—140 miles counting as a day's pay, with an hour's pay for every succeeding 15 miles. Apart from this, the fellow on the big streamliners has the same pay as the man chugging along on the short-trip freights or banging about in a marshaling yard on a wee pug engine—provided he has completed six years of continuous service as driver or fireman. Mr. Beg continued:

At the depot we have a whole lot to say as to how things are to be done. If a driver or fireman wants an easier job say—after an illness or because he is feeling the strain—he applies through the men's committee. An open meeting of the men themselves decides what job shall be given to him. Very seldom do railroad officials object to our findings.

We decide how the various trains are to be allocated on the duty roster. A man being transferred from one depot to another immediately benefits from the local benefit fund, which is run by the men themselves. Payments are deducted from the pay, deposited, and all clerical work is done by the railway company, free of charge.

We have a whole gamut of complaints and grievance committees and councils, stretching from the depot to an all-Britain council, at which representatives of the companies sit in judgment along with those of the men. And, believe me, none of these is in the "yes man" category.

We have a say in the disciplinary procedure, too. The man is entitled to a personal hearing and is at liberty to have with him anyone whom he nominates to act as his advocate; moreover, he can pursue his

case through to the highest railway official if he feels that he has had a raw deal lower down. I have been called (or should I say embroiled) frequently into action on behalf of my mates, and I must confess that up to now neither my "clients" nor myself have had cause to complain.

Mr. Beg said that the war has made little or no difference to the service conditions on the railroads. Some of the older men were asked to remain when the time had come for them to retire. Firemen can now be registered at seven-teen years of age instead of eighteen. Women are employed as cleaners. The men are also (in the majority of freight crews) working more hours than before the war, but this is quite understandable.

MR. Beg warned that "we can't grouse about getting a raw deal, but there is certainly something to be said about the state our locomotives are getting into. Before the war, if we had the faintest suspicion of 'knock' on a bearing or the slightest sign of steam from a gland or steam key, we almost turned somersaults until a mechanic was browbeaten into doing his stuff." But now, Mr. Beg continued,

... Well, we simply plug our ears to the bangs and try to see through the fog of steam which we carry constantly with us. After a turn on what could be well described as a bucking bronco, instead of an iron horse, we count the blue and black with which our hides are decorated as another point to add to the total we are summing up against "that man."

Yes, this is war. All the black and blue bruises, all the knocks, bangs, and steam coming out of Hades are not going to stop us getting those tanks, guns, and material just where your boys and our boys want them. All the clattering bits and pieces of our locomotives are being coaxed and cursed into transporting not only the stuff for them but the lads themselves, some on leave, some going to places with a definite rendezvous which must be kept secret, and some from far shores like America.

Mr. Beg admits that his associates have plenty to say to each other which the censor might not clear. In other words, British railroad workers are strictly human and just like the railroad men in America and other places.



Southwest Power Pool Investigation

THE Federal Power Commission on December 14, 1942, launched its comprehensive hearing into the matter of rates charged by the 10-company "Southwest Power Pool" for electric energy furnished to the Defense Plant Corporation aluminum plant at Lake Catherine, Arkansas.

Earlier, September 1st, the commission had instituted an investigation of the rates, charges, and other arrangements relating to pooling the power resources of the companies concerned in connection with electric energy supplied to the Defense Plant Corporation by Arkansas Power & Light Company. Facts disclosed in the hearing, Federal Power Commission officials indicated, may have a relationship to the commission's authority to arrange the cheapest source of power supply for all war industries and establishments in the country, as provided in the President's letter of September 26th to various defense agencies.

The order for hearing provided that if the commission, after the hearing, shall find that any of the rates, practices, or contracts provided in the intercompany agreements are "unjust, unreasonable, unduly discriminatory, or preferential," it will determine "just and reasonable rates" itself, and issue orders accordingly.

The companies involved include Arkansas Power & Light Company, Kansas Gas & Electric Company, Louisiana Power & Light Company, Mississippi Power & Light Company, Nebraska Power Company, Oklahoma Gas & Electric Company, Public Service Company of Oklahoma, Southwestern Gas & Electric Company, Southwestern Light & Power Company, and the Texas Power & Light Company.

The outset of the hearing was marked by an unsuccessful attempt of Southwest Power Pool counsel to offer in evidence a schedule of rates charged by the Ark-La Electric Cooperative, Inc., for power delivered to the Lake Catherine plant. Counsel contended they would have to compare the pool's rates with those of Ark-La, an REA-sponsored concern, to show that the pool's rates were fair and reasonable.

As reported in the *Arkansas Gazette* (Little Rock), however, Chief Trial Examiner Frank A. Hampton of FPC stated, in denying the pool's lawyers permission to make this comparison, that "We are not here trying or investi-

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gating the contract of Ark-La with the Defense Plant Corporation. Whether the rate charged by Ark-La is just or unjust is not under investigation. We may get into that later."

Counsel for the pool attempted to establish, by introduction of Ark-La's rates, that operations of Ark-La and the power companies are parallel. They contended that the REA cooperative and the power pool are furnishing power to the aluminum plant, side by side, with a joint meter. Ark-La, it was stated, is paid for the 32,500 kilowatts per month called for in its contract, regardless of the amount of power it delivers.

Counsel for FPC, in asking the trial examiner to exclude this comparison, however, said that "orders of the commission definitely set down the matters to be investigated, and this line of testimony is irrelevant." Further on, he continued: "You have a rate and have made arrangements to contract and supply power to the Defense Plant Corporation. It would not justify your rate to bring out another company's rate."

The trial examiner held that he could not pass on the comparability of the rates charged by the two groups. He indicated that he would follow the specific orders of the commission relative to the scope of the investigation.

Frank M. Wilkes, president of Southwest Power & Light Company, who was on the stand when this line of presentation by the pool was blocked, did succeed, however, in giving a picture of the formation of the pool and its negotiations with Defense Plant Corporation to supply power for aluminum production. Through a series of letters and other documents there was set forth the original plan for private utilities to supply all of the power that it was anticipated would be needed. Mr. Wilkes said this power was offered at approximately 7.5 mills. Later, the Ark-La was given a contract to furnish power also, and the power pool was forced to alter its own plans, it was brought out.

The power pool's contract for supplying 65,000 kilowatts called for a rate of \$130,000 a month for this amount of power, plus 4 mills per kilowatt hour used. Continuing this explanation during the second day of the investigation, Mr. Wilkes was allowed to develop that the Defense Plant Corporation subsequently persuaded the pool to alter the contract to provide, instead, for a 40,000-kilowatt demand at a rate of \$80,000 per month, with the contract to run twenty-four months. This

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was calculated to insure the pool gross earnings approximately equal to those it would have received under the original contract. However, the witness testified that its invested capital had been reduced by a War Production Board order, and that if the contract had been reduced proportionately, the plant's demand would have been 50,000 kilowatts instead of 40,000.

The pool's representatives again endeavored at this session to have FPC accept a comparison of rates between those of the pool and the REA cooperative. Two prepared documents were offered which, it was admitted by the examiner, "would enable a review in court," although he again rejected the material as "not relevant or material."

One document was an exhibit making a series of comparisons of rates, and the other was "written offer of proof" of the exhibit. The statement said: "That by amortizing the Ark-La line over the two years of its present legal life and giving due credit for salvage, the over-all power cost to the aluminum plant will be increased in the unit cost of between 4½ and 5 cents per pound of aluminum produced" and "since this power would have produced approximately 60,000,000 pounds of aluminum in the 2-year period, this loss to the Treasury of the United States would have amounted to a sum in excess of \$2,500,000."

The statement also charged that Ark-La and the Grand River Dam Authority in Oklahoma, Ark-La's source of power, both are federally financed and subsidized "and as tax-free suppliers of electric energy, Ark-La's rate for service to the Defense Plant Corporation is a yardstick for consideration of the reasonableness of the rates involved in the hearing." That "a comparison of these rates and the use of this yardstick are a matter of mathematical computation and accuracy because the benefits enjoyed by Ark-La in freedom from taxation and in governmental subsidy are ascertainable and can be applied to Ark-La's rate so as to show a really comparable rate."

A further highlight of these hearings came when a utility service organization rate expert told the hearing that he considered Southwest Power Pool's rates "too low." He was L. R. Lefferson, rate department chief for Ebasco Services Inc., New York. Mr. Lefferson said he knew of two instances of premium rates being charged for service to war industries. In response to a question by the trial examiner, he said the Tennessee Valley Authority charged a premium of 64 per cent under a contract with Proctor & Gamble Defense Corporation, and the Bonneville Power Administration, a government agency, charged a premium of 19.8 per cent for service to the Troutdale (Oregon) aluminum plant.

The witness was not permitted to give details of these rates, as the examiner had ruled earlier that comparisons of rates of other companies or agencies would not be admitted as evidence.

An outstanding development occurred, how-

ever, when the Arkansas Utilities Commission surprised the hearing by a motion to dismiss the rate investigation. Declaring that any enforced change in operations of the pool might lead to a hindrance of the war effort, the commission sided with the pool on its rates. The hearing was adjourned for the holidays with the prospect that a court decision would ultimately be necessary both as to the pool's comparison of its rates with those of the cooperative, and other matters at issue.

Halts Work on Power Unit

THE War Production Board issued a stop-work order last month affecting the Lake Catherine (Arkansas) station project of the Aluminum Company of America. The order withdrew priorities for the installation of two 35,000-kilowatt turbine-generator units; three boilers; all power plant structures necessary to house this equipment at the Lake Catherine station.

The revocation order did not apply to any other part of the project.

Representatives of the Southwest Power Pool and the Ark-La Electric Cooperative expressed satisfaction over the WPB order against the installation of the additional Defense Plant Corporation facilities which would have been operated by Alcoa. Spokesmen for the Arkansas Power & Light Company and other members of the power pool, which has a contract to furnish 65,000 kilowatts for the Lake Catherine plant, said that the WPB order "bears out the contention we have made all the time—that the Ark-La line is unnecessary."

Thomas Fitzhugh, attorney for Ark-La, said that the war effort is the only victor in the situation. "If the Navy and Army need the materials for battleships and other things more than the materials are needed for making aluminum, they should have them," he said. "This is neither a victory nor defeat for us, and is not a victory for the power pool." He emphasized that the DPC contract with Ark-La, to furnish 32,500 kilowatts, was signed before the DPC contract with the power pool, and that Ark-La was no "interloper," as many have attempted to make the public believe. He said that without Ark-La's power from Oklahoma's Grand River dam, the aluminum plant would have insufficient power.

ODT Control Expanded

PRESIDENT Roosevelt on January 4th expanded the authority of the Office of Defense Transportation over domestic transportation facilities to include street car and bus lines.

By executive order, the President placed under ODT authority "all domestic transportation within . . . the United States" and gave Director Joseph B. Eastman power to initiate requisitioning of such facilities.

Local passenger transportation equipment

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brought under ODT included busses, street railway cars, trolley coaches, trucks converted for passenger transportation, ferry boats, and other vehicles or vessels used, or capable of being used, to carry nine or more passengers (including the operator) in public or private carrier service.

The order gave Eastman—who already has authority over all rubber-borne transportation and interstate carriers—the task of providing for movement of war plant personnel in co-operation with other governmental units.

TVA to Set Own Pay Rates

THE National War Labor Board on January 4th authorized the Tennessee Valley Authority to act on wage and salary adjustments for its 41,000 employees. The WLB delegated the power in a general order which directed the TVA board of directors to act within the executive order on wage stabilization and the board's policies.

The TVA rulings are to be final, subject only to the WLB's ultimate right to review on its own motion.

REA Group Calls Meeting

THE National Rural Electric Coöperative Association, with sessions to be held January 19th and 20th in St. Louis, Missouri, would focus attention on the increasingly important rôle of rural electrification as an aid to war-time food production, it was announced last month. It will be the first annual meeting of the NRECA, an organization formed several months ago in the interest of the rural electrification movement.

All of the 800 REA-financed rural electric systems in the country were asked to send representatives to the meeting, although official delegates and alternates were to be named only by the systems that have joined NRECA.

The meeting featured nationally prominent speakers, many of them leaders in the public power field.

The theme of the meeting—"Power for Food"—was explained by former Congressman Clyde T. Ellis of Arkansas, general manager of NRECA, who said "a rare opportunity exists for service to our nation at war through increased use of electric power in food production processes. We must recognize and harness the boundless energy of electricity. We must then strive to remove the shackles that have restricted the use of this power, so that we may be permitted to make our fullest contribution to victory."

Discussions of how electricity may be put to wider use in the food production program will involve a "reappraisal" of regulations that have limited the use of materials for expansion of rural electrification, Ellis said. Measures to be considered include: the possibilities for additional service connections along existing electric lines, in cases where materials

are already available; the installation of wire on poles that were erected before rural line building came to a halt several months ago; and relaxation of restrictions on the manufacture of appliances such as milking machines, motors, water systems, and other devices, so that the farmer may obtain all the tools he needs to make his maximum effort with minimum labor.

Officials who accepted invitations to speak were Secretary of Interior Ickes, former Senator Norris of Nebraska, Senator Aiken of Vermont, Representative Rankin of Mississippi, Harry Slattery, REA Administrator, and Eugene Casey, special executive assistant to President Roosevelt.

Praises Water Power

THE West's great multipurpose reclamation developments were credited recently by Secretary of Interior Ickes with a major contribution to the war effort. In his annual report to the President for the fiscal year ended last June 30th, he said three basic needs of electric power, foodstuffs, and water in the West's war work were being supplied in "larger and more important quantities for hundreds of cities, thousands of war factories, and millions of war workers."

Ickes lauded the Bureau of Reclamation as "chief supplier of these three essentials." Special attention was given a separate undertaking—the Bonneville Power Administration—for its power contribution. The report also discussed the work of the division of power in coördinating the department's power production activities.

A "serious shortage of power for war production by 1944 unless new power sources are immediately developed throughout the nation" was predicted by Bonneville Power Administrator Paul J. Raver in his annual report to the Secretary of the Interior. He said his estimate was made from "competent studies." Interior officials charged with development of the public power program have differed with War Production Board edicts closing down projects which would not be completed until after 1943. The WPB policy has been to some degree a gamble on expansion of facilities which can be available quickly for a relatively short war.

Mr. Raver also declared that "in terms of post-war requirements our studies indicate a need of nearly 5,000,000 kilowatts for normal use in the Northwest in 1949." He projected a 7-point program for using tremendous power for industrial expansion of that area:

1. Columbia river power should be sold to such industries and on such terms as help the long run and best developments of regional resources.

2. Establishment of basic electric-process industries should be followed by fabricating and supply industries so as to support the operations of the basic industries and to provide

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products for regional consumption at lower costs than obtained at present.

3. New feasible industries should be financed and managed as far as possible by businessmen of the region.

4. Research on new processes to use electric power and raw materials in the region must be stimulated by governmental agencies and the results of such research should be freely available for use by independent enterprise.

5. Opposition of established industry to new competition from Northwest industry and the attempts of any industrial groups to control large amounts of Columbia river power must be prevented.

6. Within the region, new industries should be encouraged to decentralize in accordance with the advantages of locational factors and of the "postage stamp" rate of the regional network.

7. Columbia river power should be sold on such terms as contribute to the conservation of other resources of the region and as prevent the destruction of scenic and recreational assets.

The administration, Raver said, did not anticipate any power surplus in the Pacific Northwest when the war ends.

TVA Reports

THE Tennessee Valley Authority on January 1st reported that it is now producing power at the rate of 10,000,000,000 kilowatt hours annually. This assertion was made as the TVA announced its annual report for the fiscal year ended last June 30th had been transmitted to the President and Congress, but would not be made public in full because it contains information "which might give aid, though certainly no comfort, to the enemy."

The agency, however, gave out this statement of its accomplishments during the year:

Electric generating capacity was increased by almost one-third to 1,374,500 kilowatts, making TVA one of the nation's greatest power producers with generation of power exceeding 6,000,000,000 kilowatt hours annually through last June.

More than 70 per cent of TVA power went into war production, largely in the big electro-metallurgical and electro-chemical plants in the valley, "including a large proportion of the nation's aluminum production."

Construction was commenced on eight dams for "war production of power" and continued on three dams on shortened war-time schedules. Four dams and a large steam plant began operating, and 500 miles of transmission line were built, increasing the network by 10 per cent.

Gas Rate Cut Protested

THE United Mine Workers of America protested recently at a Federal Power Com-

mission hearing that any reduction in base rates of the Cities Service Gas Company would tend to reduce coal miners' wages in Missouri, Kansas, Oklahoma, and Arkansas.

Harry Clark, attorney for the UMWA, in an intervening petition filed in the commission's hearing, aimed at the gas company's base rate, contended that a rate reduction would create a gas monopoly in the area, tend to lower coal output, and discourage investments in the mining industry.

The petition set out there were 18,000 members of the union employed in coal mines in the four states and that thousands of them would be thrown out of work if coal mining was forced to curtail because of the inability to compete with lower gas rates. The petition also contended that a reduction of gas rates would tend to defeat the government's effort to encourage greater use of coal to conserve gas and other fuels.

The FPC on January 5th refused to consider the proposal by Cities Service to reduce its natural gas rates if the commission would drop its investigation into reasonableness of the company's charges and ordered Trial Examiner Edwin Marsh to resume hearings.

The commission declared the company's proposal, read into the hearing record by company counsel, could not be considered official, and it accused the company of trying to "create the impression that a valid and bona fide offer of settlement has been submitted to the commission."

"Such a wide disparity exists between the staff's testimony and the company's so-called offer that the public interest would suffer by acceptance of such proposal," the commission added.

May Force Gas Users to Convert

INDUSTRIAL users of natural or manufactured gas may be cut off from their gas supply if they possess but fail to operate stand-by equipment which burns coal or other fuel, the War Production Board announced January 1st.

The action was taken by amendments to gas limitation orders which provide that WPB may prohibit delivery of gas to any consumer who has auxiliary heating equipment but does not use the substitute fuel when it is available. In practice, WPB said, the amendments will apply mainly to industrial plants instead of smaller consumers.

Another provision supplements the conversion campaign of the Office of Price Administration and Office of Petroleum Administration by giving WPB power to prohibit deliveries of gas to consumers who can convert to less critical fuel without unreasonable expense or hardship, provided the conversion would help alleviate an actual or threatened gas shortage. This step is preliminary, it was stated, to development of a program of conversion from gas to coal, wood, or other less critical fuel.

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Puerto Rican Property Expropriated

PHILIP F. Herrick, Federal attorney, late last month filed a second expropriation action against Puerto Rico Railway Light & Power Company and Mayaguez Power & Light Company under the War Powers Act, after the recent decision of the circuit court of appeals at Boston holding invalid the first expropriation action under the 1940 law. (See page 882, PUBLIC UTILITIES FORTNIGHTLY, December 17, 1942.)

The suit was filed on behalf of the Federal Works Agency, which had delegated operation of the companies to the Water Resources Authority and was by presidential direction a move to maintain Federal title and insular operation of the light and power companies.

District Judge Ricardo Lacosta meanwhile granted the San Juan municipality an injunction against the Water Resources Authority preventing the authority from taking title to the capital's water system under a law passed in 1941 aimed at bringing all aqueducts and water supplies under control of the authority. Judge Lacosta ruled the law unconstitutional because it did not provide adequate compensation.

Results of the latest court actions left the former Canadian-owned Puerto Rico Railway Light & Power Company, valued at \$6,250,000, and the formerly Puerto Rican-owned Mayaguez Company, valued at \$1,000,000 in possession of the Federal Works Agency with operation by Water Resources Authority intact. Further litigation was expected, however, in view of the strong opinion of the first U. S. Circuit Court against the previous seizure.

The second expropriation action by the Federal attorney was taken on the basis of a letter from President Roosevelt to the Federal Works Agency in which the Chief Executive stated the shortage of electric power, plus the

national defense activities, demanded acquisition of the companies, and their integration with other facilities operated by the Water Resources Authority. Considerable doubt, however, was cast upon the necessity for integration through expropriation, not only by evidence adduced by private management but the experience of the War Production Board in continental United States where coordination of public with private power facilities has been found to yield just as satisfactory results in solving power shortages as unified management under the same ownership.

Must Use Light Oil

FORTY-SIX major gas manufacturing companies along the eastern seaboard were to be ordered to make their gas with light oil instead of heavy oil by January 20th, it was predicted late last month. The change, which ultimately may result in a 10 per cent increase in the consumer's gas bill, is another result of the shortage in heavy oil, which is required by the Army and Navy and war production factories.

Furthermore, experiments undertaken in the last few months have proved the feasibility of using a low-grade type of gasoline in gas manufacture, obtained as a by-product in the making of high octane gasoline for aviation. The low-grade variety, known as straight-run gasoline or forty-octane gasoline, may also be used eventually by the gas utilities. The Petroleum Administration for War notified the gas concerns that they would have to change from heavy to light oil within a month.

The change from one oil to the other does not entail any engineering difficulties, but the light oil, called gas or distillate oil, costs from 3 to 4 cents more a gallon. To manufacture gas from it costs from 4 to 5 cents more per one thousand cubic feet of gas, since there is an additional loss to the gas firms in by-products, obtainable from heavy oil, which up to now they have been able to sell.

California

Gas Rate Cut Ordered

THE California Railroad Commission on December 29th ordered Pacific Gas and Electric Company to reduce natural gas rates \$1,326,700. The formal opinion and order were handed down after several hearings before Commissioner Carl C. Baker.

This is the second reduction in Pacific Gas and Electric Company's gas rates ordered by the commission within the last year, and is predicated upon an increase in the estimated natural gas reserves, particularly in the Rio Vista and Kettleman Hills fields. The rate re-

duction represents a complete overhauling of the basic rate schedules of the system.

With the new reduction San Francisco will have the second lowest gas rate of any of the 25 major cities of the nation, being exceeded only by Pittsburgh. The new rates are applicable over the entire Pacific Gas & Electric Company system and are effective on meter readings taken on and after February 15, 1943. The amount of rate reduction by communities varies as the new classification recognizes population, customer density, heat quality of gas supplied, earnings, and other essential rate-making factors.

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Connecticut

Plans Advance Orders

THE Hartford Electric Light Company recently announced a plan which makes it possible for its customers to place advance orders for electric refrigerators, ranges, and water heaters, and thus get in line for early delivery on attractive terms after the war. At the same time the plan contemplates present investment of the customers' payments under this plan in government bonds to assist the war effort and combat inflation.

The company's announcement pointed out that present shortages of material and labor make it difficult, if not impossible, for customers to obtain such articles. Old equipment is wearing out and must be replaced. New homes are needing large amounts of such equipment. New designs based on war production discoveries will outmode much present equipment. After the war the public generally will have many needs, all of which must be satisfied when production again becomes possible.

Illinois

Rates Ordered Cut

THE state commerce commission recently directed the Peoples Gas Light & Coke Company to reduce its rates to Chicago consumers by \$3,437,955 a year, John D. Biggs, chairman, announced, and gave the company thirty days to file new schedules. This reduction reflects a similar reduction in rates granted to the company as a result of the commission's case against the Natural Gas Pipeline Company of America, affirmed by the United States Supreme Court last March.

While the company filed a reschedule in June, reflecting a partial saving to the public, the commission, after a series of hearings, ordered that the full savings be passed on.

The commission's case, begun in 1938 before the Federal Power Commission, was not joined by the Peoples Gas Company or any of the seven Illinois companies which benefited by the reduction granted. The Public Service Company of Northern Illinois and Western United Gas in the Chicago area have revised their schedules, and with issuance of the Peoples Gas Light & Coke Company order only one Illinois utility case is yet to be decided by the commission (the Kewanee Public Service Company).

The Supreme Court made the reductions to the companies retroactive for a 20-month period ended March 31, 1942, and this sum is now being returned to the public under the direction of the Federal court.

Indiana

Gas Deal Ban Upheld

A CLAY Circuit Court order setting aside approval by the state public service commission of the purchase of the Indiana Gas Utility distribution system by the Terre Haute Gas Corporation was upheld December 30th by the Indiana Supreme Court.

The Clay Circuit Court ruling was issued recently by Judge John W. Baumunk after prolonged litigation. Effect of the supreme court decision will be to require reexamination of the proposed sale by the present commission.

The sale was approved by the commission which preceded this one. The only member of the present commission who was a member when the order was issued, William A. Stuckey, dissented from the original purchase order.

It was signed by Moie Cook and Perry McCart, then chairman.

Judge Baumunk in addition to setting aside

the order permanently enjoined the two corporations from carrying out the proposed purchase. The order approving the purchase was issued December 31, 1940.

The opinion upholding Judge Baumunk's decision was written by Judge Curtis G. Shake and said in part:

"We have carefully considered all of the evidence in the voluminous record. Much of it relates to the issue of fraud of which there was no proof or finding; to the relations existing between members of the public service commission, which is no concern of ours; and to the question as to whether the interests of the people of Terre Haute would be better served by having natural gas rather than artificial gas made available to them, which is likewise not for us to determine."

Approximately \$1,500,000 worth of property at Terre Haute, West Terre Haute, Brazil, and Clinton is involved. It was believed the court's decision would delay transfer of the property.

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Wind Up 7-year Battle

THE attempt of C. W. H. Bangs to put Huntington in the utility business, which resulted in long litigation and three contempt of court jail terms for the former mayor, was closed recently by dismissal of twenty suits on appeal bonds posted in 1935. All the suits were ready for trial but had not been pressed by the Northern Indiana Power Company, which won its injunction and was sustained by a decision of the state supreme court.

The company filed its original suit January

1, 1935, when Mr. Bangs took office as mayor and connected domestic and commercial users to city lines, used before that time only to light streets and parks. Later it made certain "customers" of the city defendants in the suits, and pressed two contempt citations against Bangs for failure to obey court orders. He spent nearly a year in jail as a result. The third contempt case came later when a receiver for the "outlaw" utility tried to gain possession of money collected for current sold to pay creditors. The money, \$4,300, is still missing.

Iowa

Rate Cut Sought

THE Des Moines city council, in a private meeting, last month decided to seek lower electric rates as well as a gas rate reduction. The councilmen had previously agreed to write a letter to C. A. Leland, general manager of the gas and electric utilities in Des Moines, to ask a cut in gas prices. After that meeting some of them thought the electric reduc-

tion also was to be sought, but other councilmen did not.

As a result, the letter to Leland, drafted by City Solicitor Fred T. Van Liew and studied by the councilmen, mentioned only gas prices. Some of the councilmen criticized part of the language of this, they reported afterward, and the upshot was that further communications will be sent in connection with electric as well as gas rates.

New Jersey

Water Supplies Linked

DESIGNED to prevent local shortages in the event of bombing or other disaster in 7 north Jersey counties, a series of interconnections among 33 privately and publicly owned systems has been planned and partly put into effect, it was announced recently by George S. Burgess, chairman of the State Water Policy Commission.

The program takes in Hudson, Bergen, Essex, Passaic, Union, Middlesex, and Somerset counties.

In order to provide 24-hour coverage of water needs, five directors of emergency operations have been named to serve a week at a time at a post where they may be reached in an emergency.

Mr. Burgess said forty possible ways of interchanging water supplies have been worked out. "Existing interconnections and new ones ordered or under construction would be utilized so that various alternative reroutings of water could be made from one system to another, depending upon circumstances at the time a substitute supply became necessary," he said.

New York

May Curtail Service

WITH its reserve stocks of oil for gas manufacture seriously depleted Consolidated Edison Company announced last month that it was putting several thousand of its largest gas customers on notice that it might have to curtail service to them if these stocks cannot be replenished. These customers, many of whom operate bakeries, restaurants, hotels, etc., were asked to put into effect such economies of gas utilization as they could.

The company stated that it was using every effort through the WPB and the Office of

Petroleum Coördinator to insure against the necessity of resorting to extreme methods.

The company in a statement said that its plant and distribution capacity was ample, that its coal stocks were also ample, and that recent changes in its manufacturing processes had minimized the requirements for oil. Present reserves, however, are considerably below the twenty days' supply normally carried.

Commission Defers Action

ON motion of the Consolidated Edison system companies, the state public service

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commission recently deferred action on its application for a bimonthly meter reading and billing of electricity used only for refrigeration. The companies will renew their application next September or October.

This application was in no wise involved in the pending application for bimonthly meter reading and billing of consumers of electricity for lighting and heating.

Gas Conservation Urged

THE state public service commission, warning of an impending shortage, recently appealed to central and western New York consumers to conserve gas. The natural gas supply is dwindling and rationed fuel oil is used to produce manufactured gas, the commission said.

The appeal followed a survey by Commissioner Maurice C. Burritt to determine adequacy of the supply and ability of certain companies to meet consumer demands. Most gas-producing utilities west of Albany were included in the investigation.

Asks Retention of Rights

SPECIFIC but limited recommendations for tax reduction, and a call for an increase in the social services now rendered by the state to its people, were made on January 6th by Governor Dewey as he gave in person his first message to a joint session of both houses of the state legislature at Albany.

The governor adopted as his own a number of the recommendations made by former Governor Poletti and the Democratic minority leaders of the legislature, just before the old year ended, and which the Democrats pressed on January 6th by introducing bills to carry them out.

Heading these, from a political standpoint, was the recommendation by the governor that the state follow up the recent decision of the court of appeals in the Niagara Falls power case, and start charging the power companies for all of the water which they divert.

Coupled with this was a declaration that all water rights should be inalienable to the state in the future.

Ohio

Emergency Line Averts Shortage

AN emergency gas line connection, installed by the Ohio Fuel Gas Company, at request of the War Production Board last month, brought a partial answer to an acute gas supply shortage in Youngstown, Akron, Cleveland, and Canton.

Natural Gas to these cities, supplied by the East Ohio Gas Company, was reduced about 30 per cent of normal when a flood-created landslide broke two pipe lines at Hastings, West Virginia.

Officials of the East Ohio Gas Company appealed to the Ohio Fuel Gas Company and approximately 5,000,000 feet of gas of the latter firm would be diverted daily to lines of the former company during the emergency, Clyde Phillips, manager of transmission for Ohio Fuel, said.

Making possible the supply, Mr. Phillips said, was the recent installation of a line connecting the two firms' lines at Hinkley, Medina county. This connecting line, he said, was installed at the suggestion of the War Production Board to assure adequate gas for Cleveland during cold weather. Many war industries utilize gas there.

Pennsylvania

Hits One-man Trolleys

COUNCILMAN Eugene J. Hagerty declared war on one-man trolley cars recently. He introduced an ordinance that would require the Philadelphia Transportation Company to provide a conductor as well as motorman on every car and if there are not enough men, to use conductorettes.

"Women workers in transportation systems are nothing new in this country," Hagerty, one of the two Democratic councilmen, declared.

Hagerty contended one-man trolleys aggravate the transportation problem, which is rendered even more acute by the ban on all

pleasure driving, and also constitute a traffic hazard because of the motorman's double rôle.

Appeal Halts Rate Cut

AREDUCTION in gas rates for some 160,000 western Pennsylvania customers of the Peoples Natural Gas Company was delayed indefinitely December 29th as the company filed with the state superior court an appeal from the recent order of the state public utility commission.

The appeal also will hold up the payment of more than \$3,000,000 which the commission had ordered refunded to domestic consumers for alleged overcharges during 1939, 1940, and

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1941. The case has been pending five years.

In its final order, entered last December 7th, the commission described the Peoples' rates as "unreasonable and excessive," and besides ordering the reparations prescribed an average reduction of nearly 15 per cent in monthly bills of consumers. This, it was estimated, would reduce the costs of gas to consumers by \$1,016,323 yearly.

The company in its appeal contended that the evidence in the case does not justify the commission's conclusions and that enforcement of the order would be confiscatory. The company also petitioned the superior court for an order of supersedeas, the effect of which would be to postpone the carrying out of the commission's order until the court decides the issues on appeal.

Rhode Island

Fare Boost Appeal Rejected

THE Interstate Commerce Commission late last month ordered railroads serving the state to increase their intrastate commutation fares by 10 per cent, the amount of the interstate fare increase of last March; but Thomas A. Kennelly, state public utilities administrator, said the state would fight the increase.

Kennelly opposed the intrastate fare raise when it was announced, and the case was taken to the ICC, which on September 8th gave Kennelly and the New York, New Haven & Hartford Railroad sixty days to adjust fares to conform to its finding. The state appealed, however, and in rejecting the appeal the ICC ordered the commutation rate increase to be put into effect by February 20th.

Texas

Seeks Franchise Renewal

THE Lone Star Gas Company recently submitted a formal application to the Denison city commission for a 20-year franchise with the request that the matter be submitted to the voters at an election. The application was accompanied by a check to cover costs of an election as required by the city charter.

Byron Mitchell, manager of the company in Denison, said his firm was encouraged by the response citizens made in a postcard poll.

The original franchise, granted by voters of Denison in 1912, expired last July and the city commission since has sought to purchase distribution facilities of the company in that city.

Under provisions of the original charter, the city has a right to negotiate with the company for the property.

The gas company has contended the city forfeited its right to negotiate by seeking such procedure four months after the franchise elapsed.

Wisconsin

Cuts Electric Rate

AN electric rate reduction, amounting to \$1,555 a year, for users in Reedsburg, will go into effect with this month's reading, the Reedsburg utility commission announced recently. Rate reductions will be made in both residential and commercial lighting.

The residential rate for the first 40 kilowatts has been reduced from 3 cents to 2½ cents net. The commercial reduction is the same but covers the first 150 kilowatts. The reduction gives this city the fourth lowest rate in the state for cities between 2,500 and 10,000 population, L. E. Spratz, superintendent of the department, announced.

The rate for 100 kilowatts has dropped from \$7.50, charged in 1918, to \$2.90 for 1943 in the residential bracket, and from \$7.50 to \$3.50

for 100 kilowatts in commercial lighting.

Commission Vacancy

GOVERNOR Walter S. Goodland on January 5th appointed Willis E. Donley, Menomonie attorney, as his executive counsel, and was reported considering former Senator Jesse M. Peters, Hartford Republican who was defeated for reelection in the primary last fall, for appointment to the state public service commission.

Goodland, who will make the commission appointment to fill the vacancy created by the resignation of Commissioner Robert Nixon, refused to confirm the Peters rumor and said "I haven't made up my mind yet. I'm not going to appoint anyone who isn't qualified for the job."

The Latest Utility Rulings

Limitation on Telephone Conversations By Automatic Cut-off



THE Pennsylvania commission ordered the discontinuance of the practice of terminating local telephone messages to individual line subscribers at Johnstown exchanges of the Pennsylvania Telephone Corporation, but permitted the practice of terminating local messages to party-line subscribers for the duration of the present emergency.

The company, in constructing a new central office building in Johnstown, had installed automatic dial equipment. This included an automatic disconnection device for terminating certain local exchange calls at a minimum of six and a maximum of eight minutes. The company's rules and regulations define a local message as a message five minutes or less in duration. The commission did not, however, accept the company's interpretation of this rule as permitting the cut-off practice.

One of the rules permits the company to suspend service at its discretion for violation of the company's rules and regulations, but the commission did not consider suspension as synonymous with automatic disconnection. It was also noted that the rule permits suspension without notice to the subscribers. This, it was said, is contrary to the policy of the commission. The commission added:

Notwithstanding, if it were assumed that the foregoing definition of a local message and rules applicable to suspension or disconnection of service established respondent's right to terminate local exchange service by the cut-off device, the fact remains, and respondent does not contend otherwise, that respondent is then rendering a class of local exchange service to private branch exchange and rotary subscribers different from the class of local exchange service to individual and party-line subscribers. This difference between classes of subscribers is not estab-

lished by the effective tariff. It may be contended that respondent has the option of suspending or discontinuing service according to its rules and regulations but we believe that when such option is exercised in a manner which will extend privileges to certain groups or establish grades of service, it is necessary that the tariff specifically provide therefor.

While it might be true that the service rendered in the Johnstown exchanges and other exchanges similarly equipped with the automatic cut-off was different from the type of service rendered on manual type exchanges, or automatic dial type exchanges which are not equipped for automatic cut-off, the commission did not believe such differences in service between localities or exchanges could be considered unreasonable.

The commission recognized the fact that reasonable and proper standards of service in telephone companies may vary according to the number and relative proximity of subscribers, the uses of service, and the ability of subscribers to pay. The commission continued:

In order to render reasonable and proper telephone service upon small rural and urban exchanges, it may be necessary to install the automatic cut-off feature as a means of keeping within the economically justified investment in plant or as a means of equitably distributing service to multiparty-line subscribers, which in the instance of rural service may involve ten to twenty-five parties upon a single circuit, but it does not necessarily follow that the elements which make the installation of the device reasonable in small rural and urban exchanges, would therefore justify the installation of the device in large metropolitan exchanges.

Local telephone service has been furnished by large metropolitan exchanges within the commonwealth without the use of the cut-off device and without any significant showing of necessity or desirability of the cut-off on such service.

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Allowance of the continued practice in the case of party-line subscribers was based upon evidence that the company would be unable to obtain favorable priorities upon the trucking facilities and equipment which would be required in the event of discontinuance of operation

of the cut-off device. It was said to be necessary under the circumstances for the company to ration telephone service upon the Johnstown exchanges for the duration of the war. *Public Utility Commission v. Pennsylvania Telephone Corp.* (Complaint Docket No. 13325).



Fare Increase Authorized Because of Financial Distress

THE Tennessee commission authorized the Johnson City Transit Company, Inc., to increase its cash fares from the prevailing 6 cents to 10 cents and to increase token fares from the prevailing price of five tokens for 25 cents to two tokens for 15 cents, each token to be good for one 10-cent fare throughout the company's operation. A city ordinance approved the increase and no protests were offered.

Commissioner Jourolmon concurred in the short-term result of the order, but expressed the view that the relief granted because of present financial distress of the company should have been through a temporary rate prescription rather than through a permanent rate order. After discussing factors involved, such as lack of operating and statistical records, the effect of a rate increase in view of gasoline rationing and a decrease of private automobile use, and high interest charges on borrowed funds, he referred to the national policy as to war-time rate making.

Commissioner Jourolmon said in part:

... it seems to me that the granting of a permanent rate increase at the present time is contrary to sound principles of war-time rate making. It is the established policy of our national government, especially as made effective through the machinery organized under the Office of Price Administration, to curb price inflation, including inflation in utility rates, throughout the period of the war except in cases where increases are necessary or unavoidable. In accordance with this national policy, it is the duty of public service commissions throughout the country not to grant increases in utility rates during the war except in cases of dire need and where such increases are essential to keep companies in business. Such a national policy makes it incumbent upon public service commissions to resist utility rate increases where not absolutely necessary, and to limit such rate increases to longer or shorter war-time periods where necessary. Thus precedents have already been established throughout the country in war-time rate cases in which at the most the increases granted have been "for the duration of the war and six months thereafter."

Re Johnson City Transit Co., Inc.
(Docket No. MC-1446).



Commission Asserts Power to Order Refund

THE Arkansas Department of Public Utilities ruled that it can fix retroactive rates and order refunds, in a case where it ordered a refund of excessive revenue received in 1942. A rate investigation had been started in 1937. During the investigation, from time to time as the facts seemed to justify, the department had ordered various rate reductions, the last of these being ordered in

the early part of 1942. But revenues amounting to \$625,000 in excess of what the department believed reasonable were received in that year.

While the rates which resulted in the excess revenue were under the circumstances permitted by the department, that fact, it was said, should not prevent the department from taking any reasonable action within its powers that would se-

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cure return of the excess to consumers. The department did not doubt that it had power to enter an order prior to January 1, 1942, reducing rates for the ensuing year to the extent of the excess. The department said further:

By the order entered and served in this cause on July 2, 1937, the department acquired jurisdiction of the respondent for the purposes of a general rate investigation. This jurisdiction was not lost by any of the rate reduction orders subsequently issued. They were, like this order, merely interim orders based upon facts then before the department. They in no sense ended the investigation.

The department is of the opinion that it has the power to issue a rate order at any time while it has jurisdiction of the parties and cause; that it can make the order effective on any date prior to its issuance, subsequent to acquiring such jurisdiction, and that it can require any public utility to refund any amounts which it may have collected in excess of the new rate between its effective date and that of its issuance. While the department believes it has such power and jurisdiction it should, however, not require refunds after the utility has made commitments which would result in expenditure of the said difference, even though it represents excess earnings.

While the act creating and empowering

the department has not been construed by our supreme court, courts of other states have construed acts similar to ours. In each instance the regulatory authority was held to have the authority and the power which the department now holds it has, as set out above.

The department, after referring to decisions in other jurisdictions, concluded that it had the power and jurisdiction to enter an order putting into effect rates as of January 1, 1942, and directing that any amounts collected by the company in excess of those rates be refunded. Since, however, an upward change in rates might be required in the future, the department deemed it wiser to order a refund of the amount of excessive revenues received in 1942 instead of putting into effect retroactively schedules reducing rates and then ordering a refund of the difference between the old and the new rates. The result in either event would be exactly the same, and, said the department, where the result of either of two courses is the same, no one can successfully urge that the department pursued the wrong course. *Re Arkansas Power & Light Co. (Docket No. 225).*



Order Requiring Odorization of Natural Gas Invalid

In a suit by a gas customer for personal injuries from a gas explosion a Texas court held invalid a rule of the railroad commission requiring corporations to odorize natural gas. The court answered in the affirmative a question certified by a lower court as to whether the order was void because it was too vague, uncertain, unreasonable, and capricious. The order was as follows:

The malodorant agent to be introduced into natural gas shall be of such character as to indicate by distinctive odor the presence of gas when such gas is present in concentrations not greater than one per cent by volume. . . . By this is meant that the gas shall be given an odor by adding an agent that will vaporize, dissolve in, or be so mixed with gas . . . as to produce an odor readily perceptible to a normal or average olfactory sense of a person coming from fresh, un-

gasified air when gas is present not more than one part to ninety-nine parts of air in cases of natural gas . . .

When the state, whether by statute or by order of some governmental agency, promulgates a rule of conduct for the citizen, the court said, it must speak in specific and definite terms so that he may clearly understand what is required of him. Unfortunately, the court continued, the order was definite and specific in only one particular, and therein lay its vice. It required odorization when gas is present in the air in any proportion provided it does not amount to more than one part of gas to ninety-nine parts of air. In this respect there was said to be no ambiguity. The court continued:

While it probably was not so intended by

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the commission, the order clearly calls for odorization although gas may be present only in infinitesimal proportion. In quantity so minute as to be wholly inconsequential and utterly without dangerous potentialities to the user, but which can never be definitely determined by the one charged with the obligation to perform. The law does not demand the impossible or the vain. If it attempts to do so it is unreasonable and the attempt is void. Below what proportion in the union of gas and air is the presence of the gas harmless? At what proportion in the union does the presence of gas become discoverable because of the malodorant? Conversely, below what proportion is its presence not so discoverable? Obviously these questions are open to debate and that

is sufficient to invalidate the order.

Again, the order, in the opinion of the court, did not accord due process because it essayed to apply to situations wherein no public purpose could be served but an individual burden was imposed. The upper limit of the proportion of gas and air when odorization was required was absolutely fixed at one to ninety-nine. The court could not say that it required odorization when the proportion was greater than one per cent or that the commission intended so to require. *Lone Star Gas Co. v. Kelly et ux.* 165 SW (2d) 446.



FPC Rules on Write-ups and Other Accounting Entries by Power Company

IN a proceeding under the Federal Power Act relating to reclassification and original cost studies of the Pacific Power & Light Company, the Federal Power Commission directed the charging of write-ups to Earned Surplus and disposed of various other questions of accounting. Since it was conceded that the company owns and operates facilities for the transmission of electric energy in interstate commerce and sells electric energy at wholesale in interstate commerce, the commission declared that it is, therefore, a "public utility" within the meaning of that term as used in the Federal Power Act.

This company had been organized by the American Power & Light Company, which owned all its capital stock and, according to the commission's findings, had complete control and domination. Properties were transferred to the Pacific Company at an amount in excess of actual cost to the parent. The commission ruled that this excess was not a bona fide cost but a "fictitious increment" constituting a write-up of electric plant and properly classifiable in Account 107, Electric Plant Adjustments. It was stated:

Pacific concedes that a direct mark-up of assets is a write-up, but it would have us believe that the same result accomplished

through the device of a new corporate entity validates the excess over cost to the parent seller. We will not permit such a subterfuge to obscure the real transaction or its purpose. We will look through the form to the substance.

The company urged that the "present fair value" of its property fully supported its security structure and therefore contended that the write-up should be permitted to remain in its plant account, or, to put it another way, that alleged values had caught up with and absorbed the write-ups and for that reason they should be left undisturbed. The commission disagreed.

Having determined that this so-called write-up was not a valid cost, the commission then ordered that it be disposed of by a charge to a special reserve which had previously been set up in connection with transactions associated with the transactions which gave rise to the write-up. The amount in excess of such special reserve was required to be charged to earned surplus.

Elimination of amounts representing intangibles was ordered by amortization over a period of ten years. The commission said:

The record shows that it is not at all feasible, and probably not possible, to segregate the intangibles according to their nature. Good will, going value, franchise value, and

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monopoly value tend to merge. They are all rooted in and are associated with prospective earning power. See "The Law of Goodwill," G.A.D. Preinreich, 11 *Acctg. Rev.* 317, 326 (1936).

It is common knowledge that intangibles have questionable continuing value even in an unregulated industry. They should not be permitted to rest permanently in the accounts of a public utility, and the record of this case shows that the proper accounting treatment is to amortize them rapidly.

The amount of an underretirement representing the difference between book cost of nonelectric properties and a lesser amount at which they had been retired was required, to the extent that it exceeded the depreciation reserve for nonelectric properties, to be transferred to earned surplus instead of being charged to depreciation reserve for electric properties. The company asserted that the depreciation reserve for electric properties was sufficient to absorb the underretirement.

The commission, although not agreeing, held that in any event there is

good reason to hold that where a reserve has been provided for electric properties, chiefly by charges to electric expenses, the resulting reserve, even though excessive, should not be diverted in whole or in part to absorb a loss in some other department.

Adjustments were also made in accounts relating to additional organization expense, investment in stock of another company, unamortized debt discount and expense, and other items. Discount and expense relating to matured indebtedness, the commission held, should be charged to earned surplus and a pro rata portion of unamortized debt discount. Expense relating to maturing bonds should be charged off to earned surplus and there should be included in income accounts for the future the proportionate part of the unamortized debt discount and expense applicable to such future years until the amount is extinguished. *Re Pacific Power & Light Co.* (Docket No. IT-5611, Opinion No. 84).



Court Refuses to Interfere with FPC Investigation

AN unsuccessful effort was made by the Mississippi Power & Light Company to restrain the Federal Power Commission and its agents in an investigation of the company's books and records. The circuit court of appeals, fifth circuit, dismissed a petition to review an order directing the investigation and to stay proceedings under the order pending review.

The court also affirmed a district court judgment dismissing a proceeding against the investigators.

The court held that it had no jurisdiction to review the commission order and, consequently, no power to grant a stay of proceedings under it. The court's normal jurisdiction, it was pointed out, is over appeals from the district court. Special statutes have conferred special powers over other matters, such as the special power granted by § 313 of the Federal Power Act over orders of the

commission. This does not, however, extend to "mere preliminary or procedural orders such as this one is."

The complaint against the individual investigators alleged that two of them were citizens and residents of Maryland and two were citizens and residents of Washington, D. C., all temporarily sojourning in Mississippi. The district court judge had held that there was no jurisdiction over the persons of the defendants in the southern district of Mississippi and dismissed the complaint. The appellate court, although having some misgivings about the citizenship of the two defendants residing in Washington, assumed that they were citizens of some state other than Mississippi. The court continued:

Each is entitled to be sued in the district of which he is an inhabitant, with exceptions not here involved. 28 USCA § 112(a). The option, in cases where Federal jurisdiction

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is founded only on the fact that the action is between citizens of different states, to sue in the district of residence of the plaintiff does not avail here because the Federal jurisdiction rests also on the ground that the suit arises under the Constitution and laws of the United States. Citizens of one state sojourning in another state may ordinarily be sued in the courts of the latter state if they can be served with process there, but this is not true in the Federal courts.

A contention that § 317 of the Federal

Power Act makes a special venue provision which governed in this case and authorized suit was rejected, since there was no suit to enjoin a violation of the Federal Power Act or a rule, regulation, or order thereunder. Alleged wrongs by the investigators, the court held, were not violations of the act or an order pursuant to it. *Mississippi Power & Light Co. v. Federal Power Commission*, 131 F(2d) 148.



Right to Demand Heating Service

A COMPANY operating a heating utility has an obligation to render service on demand to at least those persons residing in the portion of the city where the utility has its mains, according to a decision of the Wisconsin commission. The company involved was operating under an indeterminate permit in La Crosse.

Complaint had been made to the commission by Eugene W. Murphy, whose home was heated by an individual oil-burning hot-water heating plant. The house under a former owner had been heated by the utility for a period of nearly ten years, with service discontinued in 1910. The utility contended that it did not have available the service which was sought without rebuilding a substantial part of the whole heating utility system and without rebuilding mains and laterals in the area near Murphy's residence. It was further contended that the mains and laterals near his home were loaded to near capacity.

The commission, after referring to the statutory requirement that every public utility is required to furnish reasonably adequate service and facilities and su-

preme court decisions interpreting this statutory provision, held that service must be furnished, stating:

It may or may not be true that the extension of service to the Murphy home will diminish or impair the service rendered to existing patrons of the utility, but existing patrons have no more legal right to service from the utility than does Murphy. The right of service from a utility is not a property right. The utility has an obligation under § 196.03 to render reasonably adequate service at least in the area where its facilities are located.

It is evident that the company is engaged in a piecemeal abandonment of heating utility service at La Crosse because such utility has not yielded as large earnings as have the company's electric and gas utilities at La Crosse. We, as a regulatory body, cannot permit the continuance of such program by the company. If the company does not want to continue as a public heating utility at La Crosse, it has its recourse by proper proceeding under the utility law. From the record in this case it is evident that when and if the lateral in the alley back of the Murphy premises is no longer fit for service, the company will decline to render service to the customer connected thereto rather than replace the lateral.

Murphy v. Northern States Power Co. (2-U-1874).



Other Important Rulings

THE Colorado commission, after the entering of a final decree by the district court enjoining a commission rate order, found in conformity with the court

decision that the company should be limited to an operating income of 6½ per cent. *Re Colorado Utilities Corp.* (Case No. 4664, Decision No. 19741).

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

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COMPRISING THE DECISIONS, ORDERS, AND
RECOMMENDATIONS OF COURTS AND COMMISSIONS

VOLUME 46 PUR(NS)

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Raytown Chamber of Commerce
v.
Central Distributing Company

[Case No. 10,270.]

Payment, § 57 — Deposit or guaranty.

1. A rule requiring a deposit or guaranty of payment, not in conflict with the general order of the Commission governing such matters, should be approved, p. 67.

Payment, § 53 — Penalty to enforce — Reasonableness.

2. A rule requiring gas customers to pay 1 cent per hundred cubic feet on delinquent bills should be modified to provide for a penalty of 5 per cent, p. 67.

Payment, § 52 — Service denial to enforce — Reconnection charge — Penalty.

3. A gas utility operating in widely scattered territory during a period of war should be permitted to add its 5 per cent penalty to bills when paid after service denial for delinquency and also an additional charge of \$2 as a reconnection charge because of the extra amount of work involved in driving to the customer's premises to turn on and turn off service, p. 67.

[November 5, 1942.]

COMPLAINT *against rule relating to deposit, guaranty, and penalties; rule approved in modified form.*

By the COMMISSION: This case is before the Commission upon a complaint filed by the Raytown Chamber of Commerce. This complainant is a corporation whose members are citizens of Jackson county. They reside in the unincorporated community known as Raytown. The complaint is against the Central Distributing Company, a Missouri corporation engaged as a public utility in the furnishing of gas service to a number of cities and towns located in the central part of the state, and particularly in the unincorporated area outside of Kansas

City in Jackson county. The gas service is furnished by the use of natural gas purchased from a gas transmission company.

The complaint is particularly against the rules and regulations of the defendant, and its practices in enforcing the rules. The rules in question relate to deposits that may be required by the defendant taken for the purpose of guaranteeing the payment of bills for gas service, and the amount of penalty exacted by the defendant if a bill is not paid by a certain date. After notice had been given to all par-

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ties interested in the matter, the case was heard at Jefferson City on the 26th day of October and submitted upon the record then made.

It is shown that the defendant now has on file as a part of its schedule governing the furnishing of gas service the following rules and regulations against which the complaint is made:

"2. Customer Shall Satisfactorily Secure Account. If the customer is not a freeholder or cannot give satisfactory evidence of financial responsibility, he shall upon request of the company give a reasonably safe guaranty in an amount sufficient to secure payment of bills for fifty days' supply of gas, and whenever such security is found to be insufficient, the customer shall upon further request of the company make a cash deposit not exceeding the amount of the monthly average of the annual consumption by such customer plus 30 per cent. The company shall pay interest at the rate of 6 per cent per annum on such cash security deposited and may at its option upon having sufficient experience with the customer's habits of payment, refund such deposit, and require no security so long as such customer makes payment in a manner satisfactory to the company.

"The company shall refund such deposits when the delivery of gas has been discontinued and upon payment of all bills due the company and surrender of deposit receipt by the customer.

"1. No deposit is required from:

"(a) Applicant who is the owner of the real estate at the place of application or is the owner of other real estate receiving service from the same place;

"(b) Applicant known to the company to be financially responsible through company records covering dealings for a period of two years or more;

"Patrons of the above classes, upon establishing this credit, are entitled to be refunded deposits previously made;

"(c) A patron not within the above classifications but now served without deposit. This exemption is permitted until such patron becomes delinquent.

"2. Cash Deposits. See Original Sheet No. 3, Rules and Regulations Governing the Distribution and Sale of Gas. Section 1, General Paragraph 2."

On August 8, 1942, the defendant filed revised rules made for the purpose of what it states "to clarify the present rules." These rules proposed are as follows:

"2. Customer Shall Satisfactorily Secure Account. Each customer shall, at any time, upon request of the company make a cash deposit of an amount not to exceed said customer's estimated bill covering one full billing period plus thirty days, or at the option of the company furnish a personal guaranty of a responsible person satisfactory to the company. In any case where such customer's deposit is less than the maximum provided in this paragraph then such customer upon request by the company shall make an additional cash deposit sufficient to secure said account within said maximum. The company shall pay interest at the rate of 6 per cent per annum on such cash security deposited provided said cash deposit remains for a period of at least six months, and provided further that the rate of interest

RAYTOWN CHAMBER OF COMMERCE v. CENTRAL DIST. CO.

of such cash deposit shall be only 3 per cent per annum if the company shall keep such cash deposit in a separate and distinct trust fund and deposited as such in some bank or trust company and not used by the utility in the conduct of its business. The company may at its option refund any deposit, and require no security so long as such customer makes payment in a manner satisfactory to the company. The company shall refund such deposit when the delivery of gas has been discontinued and upon payment of all bills due the company and surrender of deposit receipt by the customer."

It does not propose to cancel the rule by which it adds a penalty of 1 cent per hundred cubic feet for bills not paid ten days after the date of the bill. The complainant states that although the defendant now has on file with this Commission a rule governing the guaranteeing of payment of accounts the rule as the defendant proposes to file it is unreasonable and harsh.

Rule No. 12 of General Order No. 20 issued by this Commission, effective October 1, 1915, authorized gas utilities to require deposits in conformity with the following:

"Each utility may require, at any time, a cash deposit or a personal guaranty of a responsible person, at its option, from any consumer before metered service is furnished; provided that the amount so required to be deposited or guaranteed shall not exceed an estimated bill covering one billing period plus thirty days from such consumers.

"Interest at the rate of 6 per cent per annum, payable annually or upon

the return of any deposit covering the time of the deposit, shall be paid by the utility to the consumer upon every cash deposit so required; provided said cash deposit remains for a period of at least six months; provided, further, that the rate of interest of such cash deposit shall be only 3 per cent per annum if the utility keeps such cash deposit in a separate and distinct trust fund and deposited as such in some bank or trust company and not used by the utility in the conduct of its business; and provided, further, that this rule shall not be construed so as to conflict with the charter provisions of any city.

"Instead of the annual payment of interest on cash deposits as stipulated above, any other interval between payments agreed to in writing by consumer will be satisfactory to the Commission.

"If the reasonableness of any rule, regulation, or practice of any utility with reference to cash deposits or personal guaranty is challenged, the Commission shall, upon complaint and investigation, prescribe the proper rule, regulation or practice which shall thereafter be followed."

[1-3] It does not appear that the rule the defendant now has in effect or the rule it proposes will conflict with Rule No. 12 of that General Order. It is not the intention of the Commission that the defendant shall understand the Commission approves of any arbitrary action on its part at this time in requiring its customers to make a deposit, customers who have been taking gas service from it for a considerable time and have a good paying record. On the other hand, the Commission can understand how

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the defendant must be permitted to operate its business for the good of all customers and not for the good of any one or few who may take advantage of any rule the defendant may have in effect. If a customer becomes delinquent in his account the defendant must, of course, be permitted to discontinue service if payment is not made within the time prescribed. The defendant states that it allows its customers until the 18th of the month before service is actually discontinued, even though the bills were sent out on or near the first of the month. Any claim of discrimination is, of course, removed when the defendant complies with Rule No. 12 of General Order No. 20 by paying interest at the rate of 6 per cent on a deposit held in accordance with the conditions fixed in that rule.

Concerning the rule by which the defendant requires its customers to pay 1 cent per hundred cubic feet on delinquent bills not paid within ten days of the date of the bill, it appears that the penalty applied is harsh and should be modified. A large number of the utilities have filed with the Commission a rule by which a penalty or discount of 5 per cent on the bill of that amount is applied. It appears

that a penalty of 5 per cent is sufficient to encourage prompt payment of the bills.

If a customer becomes delinquent to the extent that the service is discontinued the defendant may add the 5 per cent penalty to the bill when paid and the additional charge of \$2 as a reconnection charge because of the extra amount of work involved in driving to the customer's premises to turn on and turn off the customer's gas service. Under the conditions existing in our country at this time and because of the widely scattered territories served by the defendant it appears fair and reasonable to allow the defendant to add the 5 per cent penalty to all bills that are delinquent and the \$2 reconnection charge if the service is discontinued.

After considering the evidence submitted herein the Commission will authorize the defendant to file rules it proposes governing deposits required of customers, but it will be required to modify the rule by which it adds a penalty to its bills if they are not paid by a certain date. It will also be allowed to make the charge of \$2 if it becomes necessary to disconnect and reconnect gas service to collect the delinquent bill.

SECURITIES AND EXCHANGE COMMISSION

Re Engineers Public Service Company et al.

(File No. 59-4, Release No. 3796.)

Intercorporate relations, § 19.6 — Integration of holding company system — Other businesses retainable.

1. The long historical association of a transportation business with an elec-

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tric business, the joint use of personnel and facilities, and the fact that the transportation operations returned a net income are not, in and of themselves, factors warranting the retention of the transportation business in a public utility holding company system under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), p. 76.

Intercompany relations, § 19.3 — Integration of holding company system — Disposal of properties.

2. Difficulty and expense of disposition have no relation to permissibility of retention of properties in a holding company system under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), p. 76.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of transportation business.

3. Retention of a transportation business in a holding company system under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), is not permissible where its operations are devoted to independent ends and only casually serve the interests of the permissible utility operations of the system and in its physical operations the transportation system is entirely unrelated to and involves problems different from those of the permissible business, p. 76.

Intercompany relations, § 19.6 — Integration of holding company system — Other businesses retainable.

4. Controlling weight cannot be given to the fact that severance of non-utility properties under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), will result in increased expenditures to the remaining utility businesses, p. 76.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of ice business.

5. Retention of an ice business in a holding company system is permissible under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where it functions primarily as an aid in the conduct of the permissible utility operations of the system by affording the utility buildings a cooling system in the summer and a heating system in the winter, p. 82.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of merchandising and jobbing business.

6. Retention of electric merchandising and jobbing business in a holding company system is permissible under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where the merchandising activities are not conducted for profit but rather to educate consumers to use electric appliances and to increase the permissible electric company's load by increasing the use of electricity by residential customers, p. 82.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of merchandising and jobbing business.

7. Retention of gas appliance merchandising business in a holding company system is not permissible under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where, although it is reasonably incidental to the operations of a nonretainable gas business, the gas system is not so related to a retainable electric company's business, which is the principal business of the holding company system, p. 82.

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Intercompany relations, § 19.3 — Integration of holding company system — Combination of gas and electric properties.

8. Gas and electric properties together cannot be part of a single integrated public utility system, p. 83.

Intercompany relations, § 19.5 — Integration of holding company system — Additional system — Substantial economies.

9. Gas properties of an electric company which is the principal company in a holding company system cannot be retained as an additional integrated public utility system, where evidence fails to indicate that a loss of substantial economies would attend the severance of the gas properties from common control with the electric system, although Clauses (B) and (C) of § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), are satisfied by the combination of the gas and electric properties, p. 83.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems retainable.

10. Retention of an electric utility system in addition to the principal electric system is repugnant to Clause (A) of § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where the loss of economies attending the severance of the systems is not found to be substantial, p. 88.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems retainable.

11. The standards of the (A), (B), and (C) clauses of § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), for additional systems retainable in a holding company system must all be satisfied to permit retention of additional systems, p. 92.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems — Localized management.

12. Clause (C) of § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), barring retention of an additional system so large as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation, is addressed to geographical conditions, p. 92.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems retainable — Localized management.

13. Retention of an electric utility system, in addition to the principal electric utility system in a holding company system, is repugnant to Clause (C) of § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where no operating relationship exists between the two companies, one company's service area has little economic relationship with the other company's service area, and there is no plausible means of keeping the additional system under localized management with the principal integrated system or of avoiding the evils arising when the growth and extension of a holding company bears no relation to the integration of related operating properties, p. 92.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of transportation system.

14. Retention of a transportation business in a holding company's system is not permissible under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where the business is operationally unrelated to the permissible utility operations of the system, is losing money, tends to deprive the utility business of some of the services of joint executives, is

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detrimental to the proper functioning of the utility business, and is not in the public interest or appropriate for the protection of investors or consumers, p. 94.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of ice business.

15. Retention of an ice business in a holding company system is not permissible under § 11(b)(1) of a Holding Company Act, 15 USCA § 79k(b)(1), where the ice operations are not designed to, and do not, assist in the permissible utility operation of the system and the ice business operates at a loss, p. 102.

Intercompany relations, § 19.6 — Integration of holding company system — Retention of steam business.

16. Retention of steam business in a holding company system is permissible under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where the production of steam in permissible electric generating plants, through the use of machinery specially designed to enable the combined operation of the steam business and the electric business, is both in intent and in fact integrally related to the production of electric energy, p. 102.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems retainable.

17. An electric company surrounded entirely by one system on which it is completely dependent for electric energy and which belongs to another system with which it has no operating or functional relationship contravenes the policy of the Holding Company Act and cannot be retained by the parent company as an additional system, p. 107.

Intercompany relations, § 19.5 — Integration of holding company system — Additional systems retainable.

18. Retention of an electric system in addition to a permissible electric system is proper under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), where material savings are effected by the combination of the two systems, substantial economies would be lost if the two systems were separated, and since the two systems are located in the same state, the standards of Clause (B) would be met, and the companies are situated in close geographical proximity to each other, p. 114.

[September 16, 1942.]

PROCEEDINGS under § 11(b)(1) of the Holding Company Act relating to integration of public utility systems; disposal of business not retainable under the act ordered.

APPEARANCES: James Fischgrund, Joseph Auerbach, and H. Elow B. Lester, for the Public Utilities Division of the Commission; Mudge, Stern, Williams & Tucker, New York, New York, by William E. Tucker and C. D. G. Breckinridge, and Hunton, Williams, Anderson, Gay & Moore, Richmond, Virginia, by T. Justin Moore,

and Richard W. Emory, for Engineers Public Service Company and its subsidiaries.

By the COMMISSION: This is a proceeding instituted under § 11(b)(1) of the Public Utility Holding Company Act, 15 USCA § 79k(b)(1) with respect to Engineers Public Service

SECURITIES AND EXCHANGE COMMISSION

Company (hereinafter referred to as Engineers), a registered holding company, and each of its subsidiaries, to determine what action is necessary in order that the Engineers holding company system shall so limit its operations as to comply with the standards of that section.¹ In our prior determinations in this proceeding we held that Engineers, regardless of whether its "single" or "principal" integrated public utility system will be Virginia Electric and Power Company (hereinafter referred to as Virginia) or Gulf States Utilities Company (hereinafter referred to as Gulf), cannot consistently with Clause (B) of § 11(b)(1) retain any interest in its properties located in Washington (the Puget Sound Power and Light Company and its subsidiaries), Florida (the Key West Electric Company), or Colo-

rado, Iowa, Kansas, Missouri, South Dakota and Wyoming (The Western Public Service Company and its subsidiaries). If Virginia's electric utility system is adopted as Engineers' principal system² Clause (B) of § 11(b)(1) also precludes the retention of Gulf or any of the Louisiana, Texas, New Mexico, and Mexico properties, and, conversely, if Gulf's electric utility system is so adopted Clause (B) precludes retention of Virginia or the Georgia properties.

With respect to these properties, which may be retained under Clause (B), therefore, there are now before us for decision two general questions which we answer first on the assumption that Engineers' principal system will be Virginia's electric utility system and then on the assumption that it will be Gulf's.³

¹ The history of the proceeding is contained in the attached appendix.

² In this opinion the term "principal system" will be used to refer to the "single integrated public-utility system" mentioned in § 11(b)(1). Under that section a registered holding company may retain the "single" system, such "additional" integrated systems as meet the standards of Clauses (A), (B), and (C), and such "other businesses" as meet the standards of the section in relation to the retainable integrated utility systems. Because the "additional system" standards must be applied in relation to a "single" system and because the "other business" standards must be tested in relation to the retainable utility systems, the designation of at least the *maximum* outlines of a "single" or "principal" integrated utility system is a necessary starting point.

³ We indicated in our prior opinion in this proceeding (Re Engineers Pub. Service Co. [1941] Holding Company Act Release No. 2897, 40 PUR(NS) 1), that the respondents are not entitled as a matter of right under § 11(b)(1) to an alternative finding of this character. As we said there, at p. 24: "Our function under the section is to determine whether or not any 'additional' integrated systems may be retained under the standards of Clauses (A), (B), and (C) in conjunction with a 'single' integrated system. Strictly speaking, of course, there can be no determination permitting the retention of an 'addi-

tional' system until after the 'single' system has been selected. . . ." But, since the choice in this case between Virginia and Gulf is a close one and it is within our discretion to make findings in the alternative as requested by respondents, we have concluded that it is reasonable to do so here. In this connection, we note that unlike the North American system the size and complexity of the Engineers' system is not such as to render this procedure unduly difficult.

Moreover, we wish to emphasize here what we said in our prior opinion in this proceeding concerning respondent Engineers' right to choose its principal system: "The act does not expressly state whether the selection of the 'single integrated public-utility system' retainable as the principal system is for the holding company to make solely on the basis of its own wishes, or for us to make on the basis of evidence and with due regard to the public interest and the protection of investors or consumers. An intermediate position might be that the holding company may make the selection subject to our approval or disapproval based upon evidence and judged in the light of the foregoing standards." (At p. 23.) However, we do not think it necessary to decide these questions under the circumstances presently before us, since the respondents have indicated that they would prefer to retain one of these two systems as their principal system and the record before us does not render either choice inappropriate.

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On the assumption that Virginia's electric utility system is to be Engineers' principal system, the first question is: *Which of the Georgia and Virginia properties in the Engineers' system—the transportation, ice, and appliance businesses of Virginia and the transportation and appliance businesses of Savannah Electric and Power Co.—can be retained as other businesses under the standards of § 11(b)(1)?*

On the same assumption, the second question is: *Which of the remaining utility properties in the Engineers' system—the retention of which as additional integrated public utility systems (in addition to Virginia's electric system) is not barred by Clause (B) of § 11(b)(1)—can also be retained as such under the remaining standards of § 11(b)(1) and the definitions in § 2(a)(29), 15 USCA § 79b(a)(29)?*

Similar questions arise with respect to the properties in Louisiana, Texas, New Mexico, and Mexico if Gulf is to be Engineers' principal system.

Regardless of which of the two alternative possibilities becomes Engineers' principal system and which properties may be retained along with it, there are also before us two further questions:

(1) Whether Engineers may retain its holdings of 51,357 shares, representing 8.5 per cent of the outstanding common stock of the El Paso Natural Gas Company; and

(2) What action must be taken with respect to Engineers Public Service Company, Inc., the mutual service company of Engineers' holding company system, in reducing that system to the operations permitted by § 11(b)(1).

I. The Limitations on the Operations of the Engineers Holding Company System if the Electric Utility System of Virginia Electric and Power Company Is Its Single Integrated Public Utility System

Virginia Electric and Power Company, a subsidiary of Engineers, operates an electric utility system and a gas utility system (see Re Virginia Electric & Power Co. [1941] Holding Company Act Release No. 2791, 40 PUR(NS) 341) and is also engaged in the street railway, bus, ice, and appliance merchandising businesses. It is not a holding company, but is exclusively an operating company. Its plant account, as of December 31, 1940, and its operating revenues, net operating revenues, gross income and net income for the twelve months ended that date were as follows:

	Plant Account <i>b</i>	Operating Revenues <i>b</i>	Net Operating Revenues <i>c</i>	Gross Income <i>c</i>	Net Income <i>c</i>
Electric <i>a</i>	\$68,007,540	\$14,909,800	\$5,620,751	\$5,513,393	\$3,982,839
Gas	6,051,309	1,054,987	274,185	270,370	120,892
Street railway	10,251,529	2,447,109	43,077*	38,836*	38,836*
Bus	3,309,431	2,580,317	151,467	145,329	63,698
Total	\$87,619,809	\$20,992,213	\$6,003,326 ^d	\$5,890,256	\$4,128,593

* Indicates deficit.

a Includes ice business with plant account of \$14,775 and gross revenues of \$9,619.

b Based on Virginia's Annual Report to Stockholders.

c Based on Virginia's proposed method of allocating interdepartmental expenses.

d Subtracting interdepartmental eliminations in the amount of \$3,046 leaves a total net operating revenue of \$6,000,280.

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Virginia's electric system serves an area of approximately 13,500 square miles in eastern Virginia and north-eastern North Carolina. As of December 31, 1940, the system's electric customers numbered about 170,000 in an area which has a total population of about 832,000, and which includes approximately 510 communities (224 of them with a population in excess of 100). The principal cities in which electric energy is furnished and their approximate 1940 populations are:

<i>Virginia</i>	
Richmond	193,000
Portsmouth	51,000
Suffolk	11,000
Hopewell	9,000
Norfolk	144,000
Petersburg	31,000
Fredericksburg	10,000
South Norfolk	8,000
<i>North Carolina</i>	
Roanoke Rapids	8,500

The system has a generating capacity of 213,635 kilowatts (of which steam generating capacity amounts to 181,000 kilowatts) and, by its 5,130 pole miles of transmission and distribution lines and 80 miles of underground conduits, is completely interconnected. The generating plants supply the requirements of the system, and, in addition, some interchange (net) with near-by utilities. Among the company's facilities are two 110,000-volt interconnections with Carolina Power & Light Company, a non-affiliated company, and three interconnections with Virginia Public Service Company, also a nonaffiliated company. In 1940, total output was 879,046,000 kilowatt hours and total sales amounted to 729,603,000 kilowatt hours. Those electric properties located in Virginia are subject to regula-

tion by the Virginia State Corporation Commission, and those located in North Carolina by the North Carolina Utilities Commission. We have found that the electric utility system owned and operated by Virginia constitutes an integrated public utility system within the meaning of § 2(a)(29)(A) of the act. (Re Engineers Pub. Service Co. *supra*, note 3.)

A. The "Other Businesses" Sought to Be Retained By Engineers If Virginia's Electric Utility System Is Engineers' Principal System

In addition to producing, transmitting, and distributing electricity, and operating a gas system, Virginia, as we have pointed out, conducts certain nonutility enterprises—a transportation system, an ice business and a gas and electric appliance merchandising business. Respondents seek to retain all these businesses along with Virginia's electric system on the ground that they are reasonably incidental or economically necessary or appropriate to the operation of that electric system within the meaning of § 11(b)(1).

Section 11(b)(1) directs the Commission

"To require . . . that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding-company system of which such company is a part to a single integrated public-utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public-utility system . . ."

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The section further provides in its last sentence:

"The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public-utility systems the retention of an interest in any business (other than the business of a public-utility company as such) which the Commission shall find necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems."

Respondents urge that the last sentence of § 11(b)(1) relates back to the "other business" clause in the first sentence and sets out standards in accordance with which the incidental nature or economic appropriateness of a proposed "other business" must be measured. We agree with respondents that the last sentence of the section must be read together with the "other business" clause in the first sentence. And the provisions of that last sentence expressly authorize us, in determining whether nonutility operations are reasonably incidental or economically necessary or appropriate to the basic activity of a public utility holding company—the operation of an integrated public utility system—to consider whether the continuance of the nonutility operations is "necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such sys-

tem or systems." But these provisions do not contain isolated standards. They are a closely knit part of a statute which has a clearly expressed policy, and they appear in a section of that statute which is designed to limit the operations of a holding company system to a single integrated public utility system and to reasonably incidental or economically necessary or appropriate nonutility businesses. In applying the statute, therefore, it must be remembered that the phrases "public interest," "protection of investors or consumers," and "detrimental to the proper functioning of such system" not only illuminate the meaning of "reasonably incidental or economically necessary or appropriate" but themselves derive content from their context in the section and the statute.

Moreover, Congress did not say that "the Commission shall permit the retention of a business which it finds to be necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems." Rather it instructed⁴ us to examine these factors in determining whether a business is retainable as *reasonably incidental or economically necessary or appropriate to the operations of an integrated utility system*.

The questions before us, therefore, are not merely, as respondents suggest: Is the retention of this business appropriate for the protection of investors? or Is the retention of this

⁴ The Conference Committee Report on the Act (H. R. Rep. No. 1903, 74th Cong. 1st Sess. [1935]) says, at pp. 69, 70, of this last sentence in § 11(b)(1):

"The Commission is given express authority to permit as reasonably incidental or economically necessary or appropriate to the

operations of an integrated system the retention of any business, other than a public utility as such, which the Commission finds necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of the system."

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business appropriate in the public interest? or Is the retention of this business detrimental to the proper functioning of an integrated utility system? Rather, our fundamental inquiry is: Having in mind the protection of investors, the public interest and the proper functioning of an integrated utility system, is the retention of a particular nonutility business reasonably incidental or economically necessary or appropriate to the operations of a retainable utility system? The questions suggested by respondents are thus relevant in attempting to resolve the ultimate issue but they do not exhaust the scope of our inquiry.⁵

1. *The Transportation Business*

[1-4] Turning to the businesses which are sought to be retained as reasonably incidental or economically necessary or appropriate to the operation of the Virginia electric system, we find that Virginia owns and operates

street railway and bus facilities which serve the cities of Richmond, Petersburg, Norfolk, and Portsmouth, and an interurban bus service between Richmond and Petersburg. The street car and bus facilities form a coordinated system in Richmond and Norfolk and the interurban system connects with the urban properties in Richmond and Petersburg. These four cities, having a combined population, including suburbs, of approximately 442,000 persons, are all within the company's electric service area in eastern Virginia. The railway property includes 132.38 miles of equivalent single track and 271 passenger street cars, and the bus property includes 330 busses which travel 225 miles of bus routes. During the year 1940, the street car system carried 41,612,429 revenue passengers, traveling 7,908,533 miles, and the bus system carried 41,488,712 revenue passengers and operated over 11,744,377 miles. Of the combined 19,652,-

⁵ The legislative history of the act sustains this conclusion. As the bill passed the Senate, § 11 provided, with respect to "other businesses," that a holding company and its subsidiaries must divest themselves of any interest in or control over property or persons—"to the extent that the Commission finds necessary or appropriate to limit the operations of the holding-company system . . . to a single geographically and economically integrated public-utilities system and such business as is reasonably incidental, or economically necessary or appropriate, to the operations of such system; . . . the Commission may permit as reasonably incidental or economically necessary or appropriate to the operations of such system the retention of an interest in any business (other than the business of a public-utility company as such) . . . if the Commission finds (1) that such business is affected with a public interest and its rates or charges are regulated by law, and that the retention of such interest in such business is not detrimental to the proper functioning of a single geographically and economically integrated public-utility system.

The provisions empowering this Commission
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sion to include, among other businesses reasonably incidental or economically necessary or appropriate, those businesses affected with a public interest and regulated by law were changed in conference, where the generic language now in § 11(b)(1) was substituted for the more limited inclusive language in the Senate bill. The conclusion to be derived from this otherwise unexplained change is that we are permitted to include, among reasonably incidental or economically appropriate other businesses, enterprises other than those affected with a public interest and whose rates or charges are regulated by law. The mere fact that a business falls within this description, however, did not under the Senate bill, and more clearly does not under the act as passed, render it ipso facto "reasonably incidental or economically necessary or appropriate" to the operations of an integrated utility system. In each case we must examine the character and operation of the specific business sought to be retained and its relationship to retainable utility operations and determine whether it is reasonably incidental or economically necessary or appropriate to the operation of the utility system to which it is sought to be appended.

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910 revenue miles thus operated, the bus system accounted for 59.8 per cent. The railway system, with a plant account of \$10,251,529, obtained gross operating revenues in 1940 of \$2,447,109 but suffered a net operating deficit of \$43,077. The bus properties, with a plant account of \$3,309,431, obtained gross operating revenues in 1940 of \$2,580,317 and net operating revenues (after depreciation) of \$151,467. The 1940 net income from the combined transportation operations was \$24,862 and the gross income was \$106,493.

On behalf of the retainability of the transportation properties as reasonably incidental or economically necessary or appropriate to the operation of the electric system, the respondents urge several contentions. The long historical association of the two businesses, the joint use of personnel⁶ and facilities⁷ and the fact that the combined railway and bus operations return a net income are factors upon which respondents seek to rely in this connection.

But, in deciding whether the operation of an "other business" is reasonably incidental or economically necessary or appropriate to the operation of an integrated public utility system, these contentions are not persuasive. They are of no aid in distinguishing between a reasonably incidental or economically necessary or appropriate business and any other business. The existence on the one hand of a long historical association,

or on the other hand of joint personnel and facilities or net returns is perfectly compatible with a combination whose components are not even remotely incidental, or economically necessary or appropriate, although owned and operated under common control. As we said in *Re The North American Co. (1942) Holding Company* Act Release No. 3405, 43 PUR(NS) 257, 280:

"If it be recalled that the Commission may permit retention of an interest in a nonutility business as 'reasonably incidental, or economically necessary or appropriate' to the operations of an integrated public utility system or systems, when it finds retention of such interest to be 'necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning' of such a system or systems; and if it be recalled that the phrase 'public interest' is used in connection with the policy of curing evils which result 'when the growth and extension of holding companies bears no relation to economy of management and operation or the integration and coordination of related operating properties' (§ 1(b)(4)), 15 USCA § 79a(b), (4), it becomes apparent that the historical background of the joint control of a nonutility business with a utility business has little or no bearing on the permissibility of its retention in a public utility holding company system. Interests held for a long period do not, by reason of

⁶ Only about 235 employees of the more than 3,000 persons employed by the company are employed jointly in work for the transportation and electric systems.

⁷ The two departments share space in certain office buildings and storehouses, office

furniture and equipment, a heating plant, certain manholes, poles and rights of way, and some garages and trucks. Many of the poles are also used by an unaffiliated telephone company and for city fire alarm purposes on a rental basis.

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that fact alone, achieve any relation to 'economy of management and operation' or 'the integration and coordination of related operating properties.' Indeed, it is the very purpose of § 11(b)(1), to require the severance of those interests acquired in the course of the historical 'growth and extension' of a holding company which do not satisfy the policy of the act.

"By the same token, the 'substantiality and stability of income' afforded by nonutility interests is not, in and of itself, a factor warranting their retention in a public utility holding company system. Substantial and stable income might be afforded by businesses having no imaginable relationship to the economy of management and operation of integrated public utility systems. If the 'other business' causes of § 11(b)(1) are not to be removed from their statutory context, and if we are to give full weight to the express standards and the policy of the act, we cannot find that any business is 'reasonably incidental, or economically necessary or appropriate' to the operations of an integrated public utility system or is 'not detrimental to the proper functioning' of such a system merely because it is profitable.

"The same considerations apply to economies resulting from joint use of personnel. Unless the nonutility business is such that resulting economies are *economies in the operation of an integrated utility system or systems*, the mere showing of economies is of little weight in determining whether the nonutility business may be retained."

Another claim made by respondents

in urging that the transportation properties are incidental to the operations of the electric system is that it would be difficult and costly to dispose of the properties in response to our order. But, again, as we said in *The North American Company Case*, at p. 281:

"With respect to many of the non-utility properties involved in this proceeding, the claim has been made—apparently as an argument in favor of permitting retention—that great difficulty would be faced and losses would be sustained in disposing of such properties in compliance with a divestment order. The difficulty of disposing of an interest frequently results from the inability to find interested purchasers at a price which is equal to or more than the value at which such interest is carried on the books. Realistically, the sale of such properties does not always mean that a loss has been *sustained* at the time of the sale, but rather that it may have to be recognized at that time. Where it is clear that there is no market at any reasonable price and where disposition by any other method than sale is not feasible, a company which has been ordered to dispose of various interests may, under § 11(c), request an extension of time for compliance with divestment orders."

Respondents also contend that the transportation department is reasonably incidental or economically necessary or appropriate to the operations of the electric system because it furnishes free transportation to a portion of the employees of the electric system, its vehicles carry advertising displays for the electric system without charge and it purchases a portion of

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the latter's generated energy.⁸ While the furnishing of products or services which are useful in conducting the electric utility business is relevant to a determination of the incidental character of the proposed other business, the weight to be attributed to these factors, of course, varies with their significance for the successful operation of the businesses concerned. The record in this case discloses that only a minute portion of the transportation system advertising is devoted to the requirements of the electric system. And a similarly insignificant portion of the transportation system's passengers consist of electric employees using free service. Unlike the St. Louis and Belleville Electric Railway Company, which was found in *The North American Company Case*, *supra*, to be reasonably incidental to the operations of *The North American Company's* retainable integrated public utility systems, Virginia's transportation properties are not devoted primarily to furthering the operations of its electric system. Rather, it is clear from the record, the railway and bus operations are devoted to independent ends and only accidentally and casually serve the interests of the electric system. The transportation department's purchases of electricity amount to less than 4 per cent of the total sales of the electric department. And in its physical operations the transportation system is entirely unrelated to, and involves operating problems different from the electric business. As

Virginia's vice president, T. N. Jones, Jr., stated:

"The problems are so different that it is better to have a man devote his time to the study of the transportation problems and let someone else devote his time to a study of the electric problems within the limits of the actual operations."

While respondents attempt to demonstrate that the separation of the transportation properties from the electric properties will increase the operating expenses of both, an examination of the record indicates that their claims inflate the quantity and character of the increase and fail to take into account numerous savings to be effected by the severance of the transportation system. We cannot find, for instance, that the termination of free transportation services for the electric employees will, as respondents contend, result in any significant added expense to the electric operations. In the first place, it is not at all clear that any added compensation to the electric employees will result from the termination of transportation privileges. In the second place, if additional compensation will, in fact, be necessary, this expense is properly an expense of the electric system, even when operated in conjunction with the transportation system, and will not, therefore, represent a completely new expense if the latter is operated independently.

Moreover, it must be noted that controlling weight cannot be given to the

⁸ It should be noted that this policy by which the transportation department furnished free services to the electric department operated to impose upon the former expenses that properly should have been borne by the latter. Without deciding that the protection of transportation customers in circumstances such as

these comes within the ambit of our duties under the act, we note that this informal exchange of services between the electric and transportation departments, in the past entirely unaccounted for on the company's books, was not conducive to the proper functioning of Virginia's electric utility system.

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fact that severance of nonutility properties will result in increased expenditures to the remaining utility businesses. As a result of the haphazard growth and extension of holding company operations, the staffs of operating companies may well derive portions of their pay from their services to nonutility adjuncts. Separation of nonutility from utility operations may thus increase the expense to the utility system of maintaining this personnel. Although loss of valuable talent can almost always be prevented, in individual cases apparent hardship may result. But, these hardships are—in a great majority of cases—not inevitable, and only temporary. Joint use of personnel is common to practically all cases of joint control of utility and nonutility businesses. If we were to give controlling weight to the difficulties involved in reallocating staff and salaries in any given case, no reason would appear for not doing so in any other case—no matter how tenuous the relationship between the other business and the utility business.

Not only have respondents failed to show that the transportation business is reasonably incidental or economically necessary or appropriate to the operations of Virginia's electric system, but the record discloses that the co-existence of these properties under one ownership has been detrimental to the proper functioning of the electric system and adverse to the interests of consumers and investors. Thus, much of the railway property has been carried in the electric plant account. The effect of this practice on the rates of the electric system has not been appropriate for the protection of the electric consumer. And the proper function-

ing of the electric system was impaired by an allocation of interdepartmental charges under which the transportation properties were charged considerably less than the over-all cost of the electric energy obtained from the electric system, and substantially less than the over-all cost for the use of the other facilities of the electric system. While respondents claim to have corrected exceptionable practices of this character, it is not clear that the changes completely eliminate the improprieties. On the other hand, it is certain that these practices will be ended by complete divestment of the transportation properties. Moreover, the difficulty and expense of properly allocating charges between the two dissimilar businesses and the advantages accompanying undivided attention by the company's executives to the electric operations, while not conclusive, are further considerations urging a severance of the transportation properties in the public interest and for the protection of investors and consumers.

In support of their contention that the Virginia transportation properties are retainable as an "other business," respondents have also argued, in effect, that if the transportation system were to be sold, there would be realized \$5,112,000 less than its value to Virginia. It is not clear that the avoidance of this loss would fall within the character of economies the proof of which under the statute would support the retention of an "other business" with a utility system. In addition, however, we desire to point out the unconvincing character of the argument itself.

The figure of \$5,112,000 is arrived

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at through the following process of reasoning. Respondents contend that no one would buy the transportation system except on the basis of converting it to an all-bus operation. The estimated market value of the transportation properties on an "all-bus" basis is \$5,825,000, computed by multiplying by 6—i. e., capitalizing at 16 $\frac{2}{3}$ per cent—the 1940 net operating revenues (before depreciation) of the transportation properties, amounting to \$970,000. Conversion to "all-bus" operations, they estimate, will cost \$3,500,000, which must therefore be deducted from the market value of \$5,825,000, leaving an estimated net proceeds of sale of \$2,325,000. To this figure must be added an estimated tax saving of \$778,000 (on the basis of tax rates in effect in 1941) which would accrue to Virginia for the year in which the alleged loss on such sale would be incurred, increasing the net to Virginia to \$3,103,000. The present value of the transportation system to Virginia is alleged to be \$8,215,000. Deducting from this sum the estimated net of \$3,103,000 leaves \$5,112,000, which, as indicated, is the sum by which the value of the property to Virginia is stated to exceed the amount realizable on its sale.

We must inquire, however, into the method by which the figure for the present value of the system to Virginia—\$8,215,000—was arrived at. This figure is said to represent the present worth of the "net annual increment cash" which respondents claim will be realized by Virginia from the transportation system each year until the street railway franchise expires in August, 1956, plus the estimated present value (\$970,000) of the antici-

pated proceeds of sale at that time. Respondents allege that the "net annual increment cash" will amount to \$746,000, representing the sum of (1) the \$106,000 transportation gross income (after depreciation) for 1940 (2) the \$533,000 excess of the annual accrual for railway depreciation over the estimated \$50,000 annual cash requirement for replacements, and (3) an amount equal to the claimed increase in cash expenses of the electric system if operated independently, less the Federal income tax saving which would result from such increase in expenses. Respondents then proceed to reduce this "15-year annuity of \$746,000" to its present worth by applying a discount rate of 6 per cent, the assumed return thereon when invested in the electric utility operations.

We have indicated in the text our doubts with regard to one of the items entering into respondents' computation of the value of the transportation system to Virginia, namely, the claimed increase in the expenses of the electric system if operated independently. There is an even more serious objection to respondents' method of computing the present worth of the "15-year annuity of \$746,000," however. Even assuming that the "net annual increment cash" will yield a return of 6 per cent when invested in the electric utility operation, there is no certainty that the amount of the net annual increment cash will continue at \$746,000 throughout the 15-year period. The rate of return which will be realized upon the "net annual increment cash," *if it is actually received*, bears no relation to the discount rate which should be used in determining the present value of future annual in-

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crements. The discount rate applied should reflect the risks of nonreceipt, and in our opinion a discount rate as low as 6 per cent is not adequate under these circumstances.

Turning now to respondents' estimate of the realization from the sale of the transportation system, we have noted that although Virginia expected a realization equivalent to \$8,215,000 from this property, respondents believe that no one else would pay more than \$2,325,000 for it, representing its value if conversion to an all-bus operation is contemplated. As we have seen, however, \$639,000 of the alleged \$746,000 "net annual increment cash" would be just as available to a purchaser as to Virginia itself, and we are unable to accept respondents' assumption that a prospective purchaser would be unaware of its availability, and would not use it as the basis for determining the price he was willing to pay. We must, therefore, reject this contention of the respondents.

For all these reasons we cannot conclude that Virginia's transportation properties are either reasonably incidental or economically necessary or appropriate to the operation of its electric system, and we will, accordingly, order that they be divested.

2. *The Ice Business*

[5] Virginia owns a small ice business in Williamsburg, Virginia. From the sale of ice produced in its operations the company in 1940 derived gross revenues of \$9,619 and had expenses of \$4,137, leaving a balance of \$5,481. In prior years returns in similar amounts were realized from this business. The book value

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of the property used in the ice business, which is included in the electric utility plant account, is \$14,775.

The ice plant, which has a capacity of 15 tons per day, is located in the company's electric service building in Williamsburg and functions primarily as an aid in the conduct of the electric utility business by affording for its building a cooling system in the summer and a heating system in the winter. The record sustains respondents' contention that the ice business is "subservient . . . and supplemental to the operation of . . . [the] . . . electric system and is a by-product of cooling and heating the company's electric service building, . . ." Accordingly, we find that Virginia's ice business is reasonably incidental and economically appropriate to the operation of its electric system and may, therefore, be retained.

3. *The Merchandising and Jobbing Business*

[6, 7] Virginia is engaged in the electric merchandising and jobbing business in connection with the promotion of the sales of electric energy in the territory served. It appears that these merchandising activities are not conducted for profit. Their function is to educate the public in the benefits that may be derived from the use of such appliances as have not yet found wide acceptance and to enlarge the company's electric load by increasing the use of electricity by residential customers. Gross revenues from the sale and rental of electric appliances have, according to respondents, declined from \$422,733 in 1937 to \$292,999 in 1940. Although the business operated at a net loss during those

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four years, the size of this loss has diminished considerably since 1937 so that, according to respondents' books, it was only \$23,395 in 1940. However, if Virginia's latest proposed reallocation of interdepartmental expenses were applied in 1940, the loss would have been considerably greater.

Since the activities of the appliance sales operations are reasonably designed to, and do, educate the public in the use of electricity, they are not unrelated to the business of operating an electric utility system. The discontinuance of an outside sales force in recent years and the termination of sales of those appliances with which, through persistent effort, the public is already familiar are further evidence that this business is conducted primarily for the benefit of the electric utility business, rather than as an independent adjunct. Serving the same purpose as ordinary sales promotion devices and implementing them in an effort to encourage greater consumption of electricity, these efforts, which the record discloses have tended to increase electric energy sales, may properly be considered incidental or economically necessary and appropriate activities entailed in operating the electric utility system. Virginia's electric appliance merchandising business

is, therefore, retainable as reasonably incidental to the operations of the electric utility system.⁹

Virginia is also engaged in the gas appliance merchandising business in connection with its gas operations in Norfolk. This business is conducted with the same general purposes as the electric merchandising business. In 1940 gross revenues from the sale and rental of gas appliances were \$66,977. For the first time since 1937 this business showed a profit—\$3,732—in 1940. However, if interdepartmental expenses were more properly allocated, the 1940 figures for gas appliance operations would also have been red. Although the gas appliance merchandising business is reasonably incidental or economically necessary or appropriate to the operations of Virginia's gas system, it is not so related to the company's electric system. Since, as we shall see, the gas system must be severed from common control with the electric system, Engineers must also divest itself of this business.

B. Additional Systems Sought to Be Retained by Engineers along with Virginia's Electric System

1. Virginia Gas System

[8, 9] Engineers seeks to retain Virginia's gas utility system along with

⁹ For some time prior to the enactment of the Public Utility Holding Company Act efforts were made on the part of independent appliance dealers to prohibit public utilities from engaging in the appliance business. According to one source, "between 1930 and 1937, in the legislatures of 23 states were presented bills designed to prohibit utility merchandising. In two of these, Kansas and Oklahoma, such bills were enacted into law. Kansas, Laws 1931, Chap. 238; Okla. Stat. § 5301, as amended by S. 96, 1931 Sess. Laws p. 188." (Thompson and Smith, *Public Utility Economics* [1941] 514; see also Nash, *Economics of Public Utilities* [1933] 470.) The Kansas statute was held unconstitutional by the su-

preme court of that state. (*Capital Gas & E. Co. v. Boynton*, 137 Kan. 717, PUR1933D 435, 22 P(2d) 958; writ of certiorari dismissed on procedural grounds, *Boynton v. Hutchinson Gas Co.* [1934] 292 US 601, 78 L. ed 1464, 54 S Ct 639.) A number of administrative and judicial proceedings were conducted in various states in connection with appliance merchandising by utilities. (Thompson and Smith, *supra*; Mosher and Crawford, *Public Utility Regulation* [1933] 141.) In legislating on the scope of activity permitted to holding company systems, however, Congress did not deal specifically with this question, and the language of the statute leads to the conclusion we have reached here.

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Virginia's electric system. The gas system consists of a gas manufacturing plant located in Norfolk and a distribution system which serves an area of approximately 35 square miles in the city of Norfolk, Virginia, and its suburbs. As of July 1, 1941, the system furnished gas to 29,363 customers of a total of about 157,000 persons residing in the area served. It is the second largest gas system in the state serving retail consumers. Its distribution facilities on December 31, 1940, included 207.6 miles of high pressure and 149.5 miles of low pressure mains, and its manufacturing plant had a capacity of 8,500,000 cubic feet per day (but was restricted to an actual capacity of about 75 per cent of that amount by the limitations of the piping system from plant to holders). During the year 1940, the plant produced about 1,161,800,000 cubic feet of gas and the system's total sales were 1,011,427,000 cubic feet. The book value of the gas utility plant, as of December 31, 1940, amounted to \$6,051,309, including admitted net write-ups of \$1,562,611. Its gross operating revenues in 1940 were, according to respondents, \$1,054,987, its net income was \$120,892, and its gross income was \$270,370.¹⁰ We find Virginia's gas system to be an integrated public utility system within the meaning of § 2(a)(29)(B) of the Public Utility Holding Company Act.

Since the principal system here involved is an electric utility system, under our prior decisions the gas properties cannot be part of the single integrated public utility system. Re

¹⁰ This figure is based on Virginia's proposed method of allocating interdepartmental expenses.

United Gas Improv. Co. (1941) Holding Company Act Release No. 2692; Re Columbia Gas & E. Co. (1941) 8 SEC 443, 37 PUR(NS) 288; and Re The North American Co. (1942) 43 PUR(NS) 257. Therefore, in determining whether, as respondents contend, this system is retainable in the Engineers holding company system we must consider whether it conforms to the requirements of § 11(b)(1) with respect to additional integrated public utility systems.

Section 11(b)(1) permits the retention by a holding company of one or more additional integrated public utility systems such as Virginia's gas system if we find that:

(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

Since the electric and gas systems are located in the same state, the combination is not repugnant to the standards of Clause (B) of § 11(b)(1).

Moreover, the gas system, serving only the city of Norfolk and its suburbs (an area of approximately 35 square miles), lies entirely within a small portion of the electric service

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area (which, in all, contains 13,500 square miles). Norfolk is a highly industrialized city with a population of about 144,000. Retention of the gas, along with the electric, system would result in the combination of a \$6,051,309 gas plant account (including write-ups of more than \$1,500,000) with a \$68,007,540 electric utility plant account, increasing the latter figure by 8.9 per cent, and the combination of about \$1,055,000 of gross gas operating revenues (based on 1940 figures) with about \$14,910,000 of gross electric operating revenues (also based on 1940 figures), increasing the latter figure by 7.1 per cent. Both the gas system and the electric system are subject to regulation by the Virginia State Corporation Commission, which has authority to fix rates and regulate the issuance of securities and the keeping of accounts. We do not regard this as a prohibitively large combination. On the record before us, therefore, we find that the combination of Virginia's gas and electric system is not so large, in view of the state of the art and the area affected, as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

There remains, however, for our consideration the question of the conformity of this combination to the standards of Clause (A) of § 11(b) (1). Under Clause (A), an additional integrated public utility system can be retained only if it is demonstrated that it cannot be operated independently of its present holding company parent without the loss of substantial economies which can be secured by the retention of control

by its present holding company. Respondents assert that substantial economies in the operation of both the gas and electric systems will be lost if common control of these properties is terminated. The economies are said to amount to \$71,500 in the operation of the gas system and \$56,000 in the operation of the electric system. We need not at present decide between the contention of the Public Utilities Division that the "loss of substantial economies" in the (A) standard refers exclusively to economies lost to the additional system, and the contrary contention of the respondents that the clause refers to economies lost to both the principal system and the additional system. Assuming, arguendo, that the latter interpretation is correct, we cannot find a loss of substantial economies.

The economies claimed stem largely from savings in the form of salaries which, on separation, would either be paid to allegedly necessary additional personnel or, instead of being shared, as at present, would be borne by one system or the other. In prescribing the conditions under which additional systems may be retained, however, Congress did not speak in terms of increased *expenses*. It authorized the retention of additional systems if they could not be operated independently without the loss of substantial *economies*. And in measuring the loss of *economies* accompanying the severance of a combination of two utility systems it is particularly important to consider the beneficial effects of independent ownership upon the efficient operation of each system. A consideration of increased expenditures alone does not adequately reflect

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the impact of severance upon the two systems. Where, as here, gas and electric operations are conducted in the same territory and in many ways compete with each other, the danger exists that under a single management one business may be suppressed in favor of the other¹¹ or that one will bear burdens properly allocable to the other. The record before us shows, for instance, that there have been abuses in allocating expenses between gas and electric properties. Not only has there been a failure to allocate or separate the expenses of many specific items,¹² but there has been an over-all erroneous allocation. Thus, prior to 1933, expenses were allocated between Virginia's departments in the ratio which the gross revenues from each bore to the total. After that year they were allocated on a net revenue basis, the prior year's revenues furnishing the annual yardstick for the current year's allocation. The effect of this change was to increase the expenses allocable to the electric department and to decrease the expenses allocable to the gas department. Neither method of allocation bore any relationship to the actual ex-

penses involved. With the commencement of this proceeding still other allocations have been suggested by the respondents. The impropriety of the prior allocations, however, as the respondents admit, has in the past affected the rate structures of the gas and electric operations. It is true that respondents propose to attempt to correct these practices. But that these abuses can most effectively be eliminated by complete severance is unquestionable. Moreover, the possible benefits of unsuppressed development and growth for each business must also be cast in the balance when substantial economies are measured. The economies which may be expected from a personnel single-mindedly devoted to the operation of either a gas or electric business, although not predictable in precise mathematical terms, cannot be ignored.

Turning to an examination of respondents' claims as to increased expenditures, we find that while the figures claimed for the gas operations would, if accurate and in the absence of any benefits resulting from separation, afford an impressive basis for finding a loss of substantial econo-

¹¹ Thus, in testifying with respect to the Gulf gas and electric combination, H. V. Faber, treasurer of Gulf, when asked why the need for separate service buildings for independent gas and electric systems could not be obviated by the gas system's renting a portion of the service building now used jointly, replied:

"If I had anything to do with it I don't believe you would keep it there."

Q. That is because you wouldn't want your competitor in the same building.

A. That is because if two interests get together, why, I don't believe they get along very well. We have a common interest now and it would be separate interests under this proposed gas company being a separate company. There wouldn't be anything in common.

Q. Would you say that if the gas department were independent that they would have conflicting interests with the electric operations?

A. I think the gas, another gas company would try to do its best job, and they may want to do things differently than they are being done now.

Q. You wouldn't say that the interests of a gas utility and an electric utility though would run cross current, would you?

A. I believe they would if they were separate.

¹² E.g. the failure to segregate retirement reserve among departments, the failure to charge the gas system proper rentals for building space used by it but owned by the electric department.

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mies to that system,¹³ the record discloses that the increased expenditures envisaged by respondents in the event of independent operation are excessive. In estimating the personnel requirements of the independent gas system, respondents are, to say the least, liberal in their proposals. The evidence indicates not only that a disproportionately large number of employees is contemplated for the new enterprise but that the expenses assumed to attend its operation are extraordinary. For instance, the evidence introduced in these proceedings requires a significant reduction of respondents' estimate that independent operations will require nineteen additional employees for conducting the "customers' accounting and collection" work. Nor does the record sustain a claimed cost of performing billing and accounting operations for the independent gas company alone which is almost identical with the present cost of these operations for combined gas and electric customers.

With respect to other operations also, exaggerations appear in respondents' claims. Serious questions are raised, for instance, by the asserted increase in advertising and sales promotion expenses. Not only is there doubt as to the need of at least one of the proposed additional employees but the calculated expense of advertising for an independent gas company is not sustained by the testimony. To be considered in this connection is the fact that the increased expendi-

tures in this type of work will diminish as the independent company becomes firmly established in the public mind as a separate enterprise. Although even respondents' witnesses admit the temporary character of increases in this department, no appropriate adjustment is made in respondents' claims of lost economies.

Another area in which the record contains inadequate support for respondents' contentions is that dealing with the proposed increase in the expenses of executive personnel. The record discloses that the present executives of Virginia devote no more than 6 per cent of their time to the problems of the gas operations. Respondents estimate an increase of \$11,500 in salaries of general officers and executives who will be needed if the gas properties are to be operated independently. Presumably, the additional assistance will be competent. To regard sums spent on competent personnel, who will give their individual attention and full energies to the problems of the gas system, as a flat increase in expense presupposes that the services thus rendered will be worth no more than 6 per cent of the time of Virginia's present executives. With the highest regard for the abilities and diligence of Virginia's officers, this assumption can, nevertheless, not be indulged. Indeed, a curious light is thrown on the character of the executive supervision of the gas operations—both at present and in the proposed future combination

¹³ But cf. the language of Senator Wheeler in interpreting the Conference Committee's action with respect to Clause (A):

"After considerable discussion the Senate conferees concluded that the furthest concession they could make would be to permit the Commission to allow a holding company to

control more than one integrated system if the additional systems were in the same region as the principal system and were so small that they were incapable of independent economical operation. . . ." 79 Cong. Rec. (1935) 14479. (Italics supplied.)

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of the gas and electric systems—by respondents' statement that the estimated quantity and expense of additional executive assistance required for the proposed combination of Virginia and Savannah, will not be materially reduced if Virginia's gas system is severed from the combination.

We conclude that, with respect to the gas properties alone, the record, if given its most liberal interpretation, would not sustain a finding of more than one half the claimed increased expenses.¹⁴ We further conclude that the loss of economies would in fact be less than such increased expenses.¹⁵

The statutory scheme contemplates that a holding company will be confined to the operation of a single integrated public utility system and in exceptional cases to certain additional integrated utility systems. And Congress required that the circumstances under which so exceptional a combination can be permitted must depend, among other things, upon a showing that substantial economies would be lost in the break-up of such a combination. Since this requirement is an exception to a clearly expressed general policy, it must be strictly construed.¹⁶ Moreover, in determining

what are substantial economies, we must bear in mind that Congress was informed that some loss of economies of the sort principally involved in this situation—in joint administrative, clerical, and supervisory services and the use of joint facilities—almost inevitably would accompany separation of jointly controlled utility systems.¹⁷ Against this background we must require clear and convincing evidence of a loss of economies which would seriously impair the effective operations of the systems involved in order to permit the retention of an additional system.

The record before us does not indicate that a loss of substantial economies will attend the severance of the gas properties from common control with the electric system. Accordingly, the requirements of Clause (A) of § 11(b)(1) do not permit the retention of the former as a system additional to the latter.

2. *Savannah Electric and Power Company*

(a) *Requirements of Clause (A) of § 11(b)(1)*

[10] *The Savannah Electric and*

¹⁴ This reduction in the claimed increased expenses would result in an increase of 4.6 per cent in the 1940 gas operating expenses and a decrease of 13.3 per cent in gross gas income for 1940 and 29.8 per cent in the 1940 gas income available for dividends. These figures, of course, do not in any way reflect any income tax savings to the gas system.

¹⁵ In this connection, we note further that there are certain expenses of the combination—such as the cost of continuously and properly allocating expenses—and certain savings to the electric system from severance—such as the full-time use (in view of the expansion of electric operations) of the employees and facilities formerly used in part by the gas department—which must also be considered in evaluating respondents' claims. Of course, too,

to the extent that present joint electric-gas facilities can be used by relatively more profitable electric operations after the gas department is severed, any loss which the electric system may suffer through an order of divestiture will be reduced.

¹⁶ Cf. *Spokane & I. E. R. Co. v. United States* (1916) 241 US 344, 60 L ed 1037, 36 S Ct 668; *Securities and Exchange Commission v. Sunbeam Gold Mines Co.* (1938) 95 F(2d) 699, 701.

¹⁷ Hearings before Committee on Interstate and Foreign Commerce on H. R. 5423, 74th Congress, 1st Session (1935) Part 2, pp. 1249, 1402, 1530, 1531, Part 3, pp. 2257-2277.

Hearings before Committee on Interstate Commerce on S. 1725, 74th Congress, 1st Session (1935) p. 65.

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Power Company (hereinafter referred to as Savannah) is a subsidiary of Engineers. The continued control of its properties along with Virginia's electric system is also sought by respondents. This company, in addition to operating an electric utility system, is engaged in the electric merchandising and jobbing business and the street railway and bus businesses. Its plant account as of December 31, 1940, and its operating revenues, net operating revenues, gross income, and net income for each of the departments for the year ended that date were as follows:

	Plant Account	Operating Revenues	Net Operating Revenues ^a	Gross Income ^a	Net Income ^a
Electric	\$12,932,358	\$2,081,550	\$828,626	\$826,733	\$507,410
Street railway	1,939,887	52,265	()	()	()
Bus	304,843	338,184	(107,945*	(107,957*	(163,427*
Total	\$15,177,088	\$2,471,999	\$720,681	\$718,776	\$343,983b

* Indicated deficit.

^a Based on Savannah's proposed method of allocating interdepartmental expenses.

b Not including a \$4,265 deficit from appliance merchandising.

Savannah's electric utility system serves the city of Savannah, Georgia, and a surrounding area, having a total population of approximately 120,000. Savannah itself has a population of about 96,000 and is the second largest city in the state. Of the system's 24,857 customers on March 31, 1941, 20,839 (84 per cent) were within a 3.8 mile radius of the company's general office at Savannah, and 23,917 (96 per cent) were within a 15-mile radius; the remainder of the population served is within a radius of approximately 45 miles. The system is surrounded by thinly populated territory and broad marsh lands and is almost entirely isolated, although an interconnection with Georgia Power Company, a nonaffiliated company

operating west of Savannah's territory, is under construction.

The electric system has a generating capacity of 35,500 kilowatts, limited by boiler capacity to 31,200 kilowatts. It is centered in one steam plant, is completely interconnected and includes 644 pole miles of transmission and distribution lines and 13 miles of underground conduits. During 1940, the energy generated totalled 96,326,000 kilowatt hours and sales amounted to 83,295,000 kilowatt hours.

We find that Savannah's electric utility system is an integrated public

utility system within the meaning of § 2(a)(29)(A) of the Public Utility Holding Company Act of 1935.

Since we have found that the combination of Virginia and Savannah is not repugnant to the standards of clause (B) of § 11(b)(1)¹⁸ there now remain for our consideration the questions of its conformity to the standards of Clauses (A) and (C) of that section. As we have pointed out, under Clause (A) an additional integrated public utility system can be retained only if it is demonstrated that it cannot be operated independently of the principal system without the loss of substantial economies which can be secured by the retention

¹⁸ Re Engineers Pub. Service Co. (1941) 40 PUR(NS) 1.

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of control in combination with the principal system. Respondents assert that substantial economies in the operation of Virginia and Savannah can be secured if common control of these companies by Engineers is permitted. Again, we assume, without deciding, that the lost economies whose substantiality is in question may include economies to both the principal and the additional systems. According to respondents' calculation of the economies, \$28,000 will be lost by each company in the event of severance.

It will again be noted that this amount represents increased expense, which, as we indicated above, is not necessarily equivalent to lost economies, and which does not take into consideration any improvements in service or efficiency or other benefits that may result from severance. The economies thus asserted as substantial amount to a saving of \$56,000 annually in the combined operations of these two enterprises. They are computed on the premise that the present service company, Engineers Public Service Company, Inc., will be unable to continue to render its services for a system as small as the largest possible combination of the Virginia and Savannah properties. Accordingly, respondents assert that the services now rendered by the service company must be separately provided for Virginia and for Savannah, either by additional expert personnel or by separate service arrangements with an independent service company. It is estimated that the cost of these services to the operating companies if they remain under common control would be \$56,000 less per annum than

it would be if they were operated independently. The services thus asserted as necessary are not of the kind that involve the physical, day-to-day operations of the utility properties. Rather they consist in such activities as advice with respect to taxes, insurance procurement, accounting consultation, assistance in planning and executing financing operations, and public relations. And even in these fields they encompass, for the most part, supervisory and consultative work rather than preparation of reports or studies or accounts in the first instance. In short, they are of a general character which might inhere in the operation of any two similar and related, but not jointly operated, businesses.

In considering the Public Utility Holding Company Act of 1935 Congress was informed that economies of this type attended holding company control and that increased expenses of this character might attend the severance of operating companies from holding company systems.¹⁹ The Congress, nevertheless, provided that a holding company was to be limited in its operations to a single integrated public utility system, and only in certain exceptional cases did it authorize the retention of more than one integrated public utility system under common control. One of the conditions defining these limited cases was the achievement of substantial economies by combination. This statutory requirement of "substantial economies" (which, as we have pointed out, is contained in an exception to a general policy and must, therefore, be strictly construed against

¹⁹ *Supra*, note 17.

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those claiming its benefits)²⁰ must be tested in the light of congressional knowledge that in the normal course of events certain economies, particularly of the sort here involved, could be obtained by common control. At least a proportionately larger saving, and one of considerable significance in successfully conducting the utility businesses involved, must be shown in any given case in order to permit the retention of the properties under the standards of Clause (A). The legislative history of this statute further emphasizes the size and scope required of the losses attending separation in order that the necessary loss of "substantial economies" be found. (Cf. *Re The North American Co.* [1942] 43 PUR(NS) 257).²¹

We cannot find that the standards of Clause (A) permit the retention of Savannah under common control with Virginia. Accepting respondents' figures as both quantitatively accurate and qualitatively appropriate, we are presented with an increase in expenses of \$28,000 annually for each company. This represents a .3 per cent increase in Virginia's 1940 electric operating expenses and a 2.2 per cent increase in Savannah's 1940 electric operating expenses.²² It represents .5 per cent of Virginia's gross, and .7 per cent of its net income from electric operations in 1940 and 3.4 per cent of Savannah's gross and 5.5

per cent of its net income from electric operations in 1940.²³ When the background and meaning of the congressional requirement of "substantial economies" is examined and the potentialities of a staff devoted solely to the problems of efficiently conducting one electric system are considered, this showing does not permit the retention of Savannah under the standards of Clause (A), even if respondents' figures are accepted.

But the figures must be approached somewhat critically. In the first place, we note that they include economies in the operation of the transportation properties which, as we shall see,²⁴ are not retainable in any event. Accordingly, the savings are immediately not as great as claimed. Moreover, respondents arrive at the claimed "substantial economies" by comparing two entirely hypothetical costs—the estimated costs for providing services for the two companies when combined under common control and the estimated cost for providing services for the two companies when independently managed. The uncertain nature of evidence of this character requires care in the examination of the asserted claim and circumspection in the reliance on the offered proof. The accuracy, for instance, with which respondents have gauged the number and expense of additional experts is shaken by their statement that no material change will

²⁰ *Supra*, note 16.

²¹ Evidence of congressional intent, and knowledge of the problem, in using the word "substantial," is disclosed in the statement of the Senate Committee on Interstate Commerce (Senate Report No. 621, 74th Congress, 1st Session (1935), p. 9) made in discussing the requirements of the bill in respect of arrangements with service companies: "The requirement that mutual service companies must per-

form their contracts for member companies at a *substantial saving* to member companies has been relaxed so as to require *only a reasonable saving*." (Italics supplied.)

²² These figures are based on Savannah's proposed method of allocating interdepartmental expense.

²³ *Idem*.

²⁴ Page 28, *infra*.

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be required in the scope and expense of this assistance, even if Virginia's transportation and gas properties and Savannah's transportation properties are not included in the anticipated combination.

Moreover, we believe that the loss of economies which Engineers claims will accompany independent operation is not borne out by the record. These economies, as we have noted, are predicated on savings in obtaining supervisory services which it is contended are necessary in the operation of the two companies. It is anticipated that the addition of expert executives to Virginia's staff who can also render appropriate services to Savannah will more economically afford the necessary assistance than will the employment of a service company. But many of the functions which it is proposed that the supervisory experts will perform could be efficiently performed by members of the present executive staffs of each operating company. And the fact that Engineers continuously sees fit to recruit its supervisory experts from the ranks of the operating company executives reflects a capacity in these men for that purpose. That these services have not been performed by the operating personnel in the past is at least partially attributable to the historical policy of the holding company system which denied them the opportunity to fully exercise their abilities in these matters. Respondents have not demonstrated that an independent local management requires such thoroughgoing or expensive assistance of additional experts as is contended.

The record does not convince us

that the price of independence and the economies of common control are substantial. We, therefore, cannot find that the separation of Savannah from Engineers' system will result in the loss of substantial economies within the meaning of Clause (A).

(b) Requirements of Clause (C) of § 11(b)(1)

[11-13] Clauses (A), (B), and (C) of § 11(b)(1), establishing the requirements for the retention of a public utility system in addition to a principal system, are set forth in the statute in the conjunctive. To permit a holding company to control more than one system we must find that the standards of all three clauses are met by the proposed combination. Compliance with one or two will not suffice. Savannah has failed to meet the standards of Clause (A), and on that ground alone its retention by Engineers as a system additional to Virginia is precluded. While, therefore, our decision with respect to Clause (A) renders unnecessary any determination with respect to Clause (C), we feel that in a proceeding of this character a resolution of this latter question will not be inappropriate.

Under Clause (C) an additional integrated utility system can be retained by a holding company only if "The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation."

Respondents have suggested that, since Clause (B) establishes geo-

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graphical conditions which must be met in order to permit common control of more than one integrated public utility system, Clause (C), requiring that a combination be "not so large" as to impair certain specified advantages, cannot be, and is not, addressed to geographical conditions. This argument misapprehends the character of the (A), (B), and (C) clauses in § 11(b) (1). While these clauses impose separate conditions, these conditions do not set up mutually exclusive types of standards. The fact that Clause (B) is concerned with certain geographical considerations does not mean that all geographical factors are excluded from the scope of the other two clauses. And, in fact, the words, "not so large (considering the . . . area or region affected) . . .," indicate the existence of geographical considerations to be taken into account in applying the standards of Clause (C). The relevance of such considerations in the sensible application of the clause is manifest. The clause is concerned with the effect of the size of a *combination* of integrated public utility systems on the advantages of localized management, efficient operation, and effectiveness of regulation. The magnitude of the distances and differences between the service areas of the components of the combination clearly has some bearing upon the possibility of obtaining for the combination the advantages of localized management, efficiency of operations, and effectiveness of reg-

ulation. It is almost too obvious to need explicit statement that, other things being equal, the advantages of localized management, for example, are less likely of achievement in a combination whose properties are separated by 450 miles than in a combination of adjacent properties.²⁵

The legislative history of the act bears out the plain meaning of its language. The Senate Committee Report points out that one of the purposes of the legislation is "to confine the operations and the interest of each public utility system to the actual utility business of a given region so that the system will have to work out a modus vivendi with the population of that region. . . . A far-flung disjointed system is independent and absentee so far as any particular community in its system is concerned. Its management has the problems of no one community for its exclusive consideration. It derives a great portion of its power and its profits from outside sources over which the community has no control. It can never be successfully regulated by the community it serves. . . . An operating system whose management is confined in its interest, its energies and its profits to the needs, the problems, and the service of one regional community is likely to serve that community better, to confine itself to the operating business, to be amenable to local regulations, to be attuned and responsible to the fair demands of the public. . . ."²⁶

Clearly Congress contemplated

²⁵ Of course, the fact that geographical factors must be considered in determining whether a combination is too large does not mean that an examination of the size of the physical properties, plant accounts, revenues or income

is not also apposite in treating the requirements of Clause (C).

²⁶ Senate Report No. 621, 74th Congress, 1st Session (1935), pp. 11, 12.

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that geographical restrictions in Clause (C) determined on the basis of the "area" or "region," and supplementing the automatic limitations of Clause (B) which are based on state boundaries, might be necessary to effectuate the purposes of the act.

If the retention of Savannah is permitted, Engineers propose to establish its headquarters in Richmond and to operate the two companies from that city. The electric systems of Virginia and Savannah are approximately 315 miles apart at the closest point and approximately 525 miles apart at the farthest point. Their executive officers are separated by 443 miles. Savannah serves only the city of Savannah and its suburbs. Its service area is surrounded by marshy, uninhabited territory. Virginia serves eastern Virginia and northeastern North Carolina. No operating relationship exists between the two companies. The industrial and agricultural life of Virginia's service area has little economic relationship with that of Savannah's service area. In fact, as one of respondents' witnesses indicated, between the areas served by Virginia and Savannah there is little, if anything, in common which would not be common to any two different economic, geographical, and political areas of the South. Under these circumstances it does not appear that an arrangement by which the chief execu-

tives would still only occasionally visit the properties in Savannah or the region in which they operate²⁷ would keep these additional systems "under localized management with a principal integrated system"²⁸ or would avoid the evil that arises when the growth and extension of a holding company "bears no relation to . . . the integration and coordination of related operating properties."²⁹ An awareness of, and a sensitivity to the problems of the population of Savannah are not likely to be engendered in a management which resides and works in Richmond.³⁰ Accordingly, we cannot find that the combination is not so large as to impair the advantages of localized management.

The record before us will, therefore, not sustain a finding that the combination of Virginia and Savannah meets the requirements of Clause (C) of § 11(b)(1).

[14] In view of the fact that Savannah, under the standards of Clauses (A) and (C) of § 11(b)(1), cannot be retained by Engineers as an integrated public utility system in addition to Virginia's electric system, we will order Engineers to divest itself of Savannah. We doubt whether, under the circumstances of this case, it is necessary for us to decide which of Savannah's other businesses are reasonably incidental or economically necessary or appropriate to the operation of its electric system.

²⁷ Respondents in their brief admit that "the only change that will be made in management in effecting the combination of the Virginia and Savannah companies will be the transfer of certain executives and experts from New York to Richmond."

²⁸ H. R. Report No. 1903, 74th Congress, 1st Session (1935) p. 71.

²⁹ Holding Company Act, § 1(b)(4).

³⁰ "It may be observed that § 11 (b) in both the Senate bill and the House amendment contemplates the reestablishment of the advantages of localized management in the operating utility industry and the consequently necessary breakdown of the control of large holding companies over geographically scattered operating utility companies." Op. cit. *supra*, note 28, at p. 70.

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However, since respondents have so requested, since the record is before us, and since the task is relatively simple,³¹ we deem it appropriate to set forth our views upon the retainability of Savannah's other businesses.

As we have already pointed out, Savannah, in addition to engaging in the electric utility business, operates a transportation system. Although originally this enterprise was entirely a railway system, the company has gradually shifted to bus operations so that today it operates 10 bus lines with a total route mileage of about 42 miles and only 3 railway lines with a total equivalent single track mileage of about 17.5 miles. Over these routes service is furnished by 17 passenger and 7 service street cars and 49 busses. Of the approximately 2,300,000 revenue miles travelled by the combined bus and railway facilities, about 81 per cent were covered by busses. The railway properties—both tracks and rolling stock—are old and in constant need of expensive repairs. Indeed, in view of the condition of these properties the immediate discontinuance of railway service and the substitution of busses has been recommended to and considered by Savannah's officers.

As of December 31, 1940, the book value of Savannah's transportation investment was \$2,244,730 as compared with a book value of its electric utility investment of \$14,718,632. In 1940, the electric system's gross revenues were \$2,081,550 and the transportation system's gross reve-

nues were \$390,449. Electric net income for that year amounted to \$826,733, as compared with a transportation operating deficit of \$107,958.

The equipment used jointly by the two departments consists largely of poles³² from which both trolley and electric wires are suspended. Joint use is also made of automobiles and trucks, certain garage and automotive repair facilities and a general office building. Of the company's 381 employees, 126 perform work for both departments, but the majority of these are engaged in clerical, repair, and administrative, rather than operational, work.

The 1,818,700 kilowatt hours of dc electric energy³³ which the electric system supplied to the transportation properties in 1940, was charged on the company's books to the latter at \$7,233, but an admittedly fairer allocation would increase this charge to \$23,844. In addition, certain miscellaneous ac electric energy, charged on the books to the transportation department at \$1,039 but more properly chargeable at \$4,970, was supplied by the electric department. On its side the transportation system furnished certain electric employees with free transportation.

Respondents contend that the severance of the transportation properties will require the absorption by the electric system of expenses in the amount of \$50,851 annually. These expenses, which are now borne by the transportation properties, relate to the

charges a rental for this use of the poles.

³³ The equipment for converting the company's ac power into this dc power, although used only for railway purposes, is carried in the electric property account.

See Re Engineers Pub. Service Co. (1941) 40 PUR(NS) 1.

³² To many of these poles are attached the wires of an unaffiliated telephone company and the city's fire-alarm system. The company

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joint use of facilities and employees.

As respondents admit, there is little operational relationship between the two departments; and when motor busses are substituted for trolleys there will be none. As one of respondents' witnesses pointed out in discussing the fact that entirely separate storage facilities are maintained by the two departments:

"If the storerooms were combined we would not achieve any economy. The materials are entirely different. They cannot be put together. The men in the storerooms who handle the materials would have to be there in the same number as they are at the present time. We would have no economy from combining the two storerooms.

"The functions of the two departments are entirely separate. The men who operate the departments are separate; regardless of whether you have them in the same building or in widely separated buildings. . . . I think they could just as efficiently operate in one building or in widely separate buildings; each department would still perform its own function."

The record shows that the same conception is equally applicable to the entire operational relationship of the two departments.

We are thus asked to permit the retention, as reasonably incidental or economically necessary or appropriate to the operation of a utility business, of a property which is not related operationally to the utility, which is operating at a loss and whose reten-

tion in the past has resulted in serious misallocations of expenses and questionable entries in property accounts.³⁴ The long historical association of the two departments, the sharing of personnel and equipment, claimed losses attending severance, the fact that free transportation is afforded to employees of the electric department and that the transportation department consumes electric energy produced by the former are urged in favor of permitting this combination. Since the losses attending severance are somewhat exaggerated, since the transportation department's consumption of electricity, at best not substantial, is, according to the recommendations of the company's officers, to be virtually eliminated by conversion to bus operations, and since the number of electric employees furnished free transportation is of small consequence in the essentially independent operation of the transportation department, respondents' only relevant arguments fall. We find that the retention of an operationally unrelated business, which is losing money and which must deprive the electric business of some of the services of joint executives, is detrimental to the proper functioning of the electric system and not in the public interest or appropriate for the protection of investors or consumers. A fortiori we cannot find that the retention of this business is reasonably incidental or economically necessary or appropriate to the operation of Savannah's electric utility system.³⁵

In connection with its electric busi-

ness, Savannah itself exceeds the amount which could be realized upon any sale of such system. We have indicated above (p. 80) our doubts as to the relevance of such a con-

³⁴ See note 33, *supra*.

³⁵ As in the case of the Virginia transportation system, respondents have also argued, in effect, that the value of the transportation sys-

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ness, Savannah is engaged in the merchandising of electric appliances. As part of its general sales promotion activities, the company seeks to increase the use of electric energy by promoting the sale of those appliances which do not enjoy satisfactory customer acceptance in its electric service area. Its policy in this business is to reduce its efforts with respect to those appliances in which customer acceptance is being independently developed.

The gross revenues from the sale of appliances during 1940 were \$161,222. Although on the company's books the appliance business showed a net return of \$11,598, a more proper allocation of interdepartmental expenses would result in a deficit of \$4,265. Nevertheless, there is evidence to indicate that the sale of these

appliances has contributed to the growth of the electric load.

On the record before us, and for the reasons stated in connection with Virginia's electric appliance business, we find that Savannah's electric appliance business, which is operated in a similar fashion, is reasonably incidental to the operations of the Savannah electric system.³⁶

C. Conclusion

Engineers must divest itself or cause the divestment of all interests, direct and indirect, in Savannah and the gas utility system, the gas appliance business, and the transportation properties of Virginia. Moreover, of course, if Virginia is to be Engineers' principal system, Engineers must divest itself of all interest, direct and indirect, in Gulf and the Louisiana, Tex-

attention to the question of the retainability of an "other business." Moreover, here too we do not consider the argument itself convincing. In view of the \$3,322 net operating deficit of the Savannah transportation system even after conversion to an all-bus operation (estimated on the basis of 1940 operations), respondents claim that Savannah cannot hope to obtain for its transportation properties in the present market more than their salvage value of \$212,000, as compared with their "present value" of \$513,271 to Savannah itself. The latter figure is arrived at by capitalizing at the rate of 7 per cent the "net increment cash" of \$35,929 a year which it is claimed Savannah will realize from its transportation system, computed by deducting from the \$50,851 alleged increased cost of operating the electric system independently of the transportation system (1) the \$11,600 saving in Federal and state income taxes which such increased cost would produce, and (2) the \$3,322 net operating revenue deficit of the transportation system.

If, as respondents assume, the "annual net increment cash" will produce a return of 7 per cent when invested in the electric utility business, presumably the \$212,000 of salvage on the transportation properties would yield a like return, or \$14,840 per year. So on respondents' own figures the net annual loss resulting from severance of the transportation properties would be only \$21,089 (i.e. \$35,929

less \$14,840). As we indicate in the text, we believe the alleged increased costs of operation attending severance are somewhat exaggerated. Furthermore, the \$50,851 estimate of increased costs include approximately \$30,000 of pension expense for transportation employees. The \$513,271 "present value" to Virginia assumes that the \$30,000 pension expense is a permanent continuing annual expense that Virginia will have even if the transportation property is sold. Obviously if this property is sold the pension expense to Virginia will not continue indefinitely at the present level. To the extent that at ultimately declines the \$21,089 annual loss to Virginia resulting from severance of the transportation properties will be diminished. Finally, respondents' estimates make no allowance for possible substantial tax savings which might accrue to Savannah as a result of the realization of a "tax loss" on the transportation properties in the year in which they are sold.

³⁶ The evidence in this record will not, of course, sustain a finding that Savannah's non-utility businesses are reasonably incidental or economically necessary or appropriate to the operation of Virginia's electric utility system. Accordingly, since Savannah's electric system must be severed from common control with Virginia, these businesses will also have to be eliminated from Engineers' holding company system.

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as, New Mexico, and Mexico properties.

II. The Limitations on the Operations of the Engineers Holding Company System if the Electric Utility System of Gulf States Utilities Company Is Its Single Integrated Public Utility System

We now turn to a consideration of the permissible scope of the operations of the Engineers holding company system on the assumption that the electric utility system of Gulf is its principal system. In that event, of course, neither Virginia nor Savannah may be retained by Engineers.

Gulf is engaged in the electric and gas utility businesses and also operates steam, water, and ice enterprises and an appliance merchandising business. Its plant account as of December 31, 1940, and its operating revenues, net operating revenues, gross income, and net income for the year ended that date were as follows:

	Plant Account	Operating Revenues	Net Operating Revenues ^a	Gross Income ^a	Net Income ^a
Electric ^b	\$55,489,558 ^c	\$9,740,739 ^d	\$3,530,151	\$3,529,091	\$2,319,417
Gas	1,676,152	638,711 ^e	157,109	163,998	128,806
Water	1,570,771	235,375	50,009	49,715	14,686
Ice	557,180	118,643	48,026*	36,575*	36,575*
Total	\$59,293,661	\$10,733,468	\$3,689,243	\$3,706,229	\$2,426,334

* Indicates deficit.

^a Based on Gulf's proposed new allocations of interdepartmental expenses.

^b Includes steam property and revenues.

^c Includes \$419,333 of common utility plant acquisition adjustments, and \$5,149,525 of electric plant acquisition adjustments.

^d Not including \$745,642 from sale of electric appliances.

^e Not including \$81,215 from sale of gas appliances.

Gulf's electric utility system serves a territory of approximately 27,000 square miles in size in southwestern Louisiana and southeastern Texas. The electric system, about 350 miles long, extends from approximately 20 miles east of Baton Rouge in Louisi-

ana (and continuing about 175 miles in Louisiana) to approximately the lower reaches of the Brazos river in Texas. It serves a population of about 405,000 of whom some 92,000 are customers. The principal cities in which electric energy is furnished (and their estimated 1940 population) are:

Texas	
Beaumont	60,000
Port Arthur	46,000
Orange	9,500
Huntsville	6,500
Navasota	6,300
Louisiana	
Baton Rouge	38,000
Lake Charles	23,000
Jennings	7,400

The system, whose principal steam generating plants are located in Beaumont, Texas, and Baton Rouge, Louisiana, and have installed capacities of 85,000 kilowatts and 88,500 kilowatts, respectively, has a generating capacity of 191,768 kilowatts of which 190,620 kilowatts is steam and 1,148 is internal combustion capacity. The electric

facilities are interconnected throughout except for the properties at Jasper and Alvin in Texas. We have found that the electric utility properties of Gulf (exclusive of the properties at Alvin and Jasper which we will discuss later in this opinion) constitute

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an integrated public utility system within the meaning of § 2(a)(29) (A) of the act. (Re Engineers Pub. Service Co. [1941] 40 PUR(NS) 1).

A. *The "Other Businesses" Sought to Be Retained by Engineers if Gulf Is Engineers' Principal System*

Gulf not only operates an electric utility and a gas utility system, but, as we have pointed out, it is also engaged in various nonutility operations. It maintains a steam business, an ice business, and a water business, and it engages in appliance merchandising. In addition, a transportation business, the Baton Rouge Bus Company, although a direct subsidiary of Engineers, is in some respects conducted under Gulf's auspices. Respondents contend that these businesses are retainable by Engineers along with the Gulf electric system because they are reasonably incidental or economically necessary or appropriate to those electric operations, within the meaning of § 11(b)(1).

1. *The Transportation Business—Baton Rouge Bus Company, Inc.*

The Baton Rouge Bus Company operates a bus transportation system in and around the city of Baton Rouge, Louisiana, serving a population of approximately 70,000. For service over its 14 miles of bus routes the company has 32 busses in operation. On December 31, 1940, the company's plant account totaled \$271,747; its operating revenues for the twelve months ended that date were \$275,148, its net operating revenues for that period were \$35,061, and its net income was \$34,938. During 1940, the busses

operated an aggregate of 1,168,000 revenue miles and carried 5,543,000 passengers.

Except for a few joint executives and office employees and the use of space in the Gulf office building in Baton Rouge, the transportation system is entirely independent, in its operations, of the electric system. The joint employees, other than the executives, are telephone operators, payroll clerks, accountants, and other general office functionaries. The office space used is small, its fair rental value, according to respondents, being \$75 per month.

In advocating the retainability of these transportation properties as reasonably incidental to the operations of the electric system, respondents urge many of the arguments which they urged with respect to the retainability of Virginia's transportation system. The long historical association of the electric and bus properties, the joint use of facilities and employees (albeit considerably smaller than in the case of Virginia), and the profitable nature of the transportation business are all contentions which we dealt with in considering Virginia's transportation properties.³⁷ They are as unpersuasive here as they were there.

As in their treatment of the combination of Virginia's electric and transportation properties, respondents contend also that the severance of the Baton Rouge Bus Company from common control with the Gulf electric system will increase the expenses of operating the latter. This increase is asserted to stem almost entirely from the necessity for continuing the pres-

³⁷ See discussion, *supra*, at p. 77 *et seq.*

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ent compensation of the joint employees whose salary is now partially derived from the bus operations. Although serious questions arise as to both the relevance of respondents' contentions and the accuracy of their estimates in this respect, even were we to agree with their presentation, we cannot find that the business is retainable. In the first place, the increased expense claimed amounts to about $\frac{1}{2}$ of 1 per cent of Gulf's net income. In the second place, as we indicated above, § 11 (b) (1) does not require a mechanical adherence to mathematics. In determining whether the public interest and the proper functioning of the electric system will best be served by severance of the transportation properties, we must measure the advantages of undivided attention to the electric business by the present joint employees and executives as against the minute saving claimed.

Even less than Virginia's transportation properties are the Baton Rouge bus operations incidental or economically necessary or appropriate to the utility operations involved. Unlike the Virginia transportation system, the Baton Rouge properties are entirely bus properties. No contention with respect to load building can be made.³⁸ Moreover, also in contrast to the Virginia operations, no free transportation is furnished by the Baton Rouge Bus Company to the electric system's employees. Even the claims to incidentality asserted in these respects in connection with the Virginia transportation system are thus wholly absent

³⁸ Nor can any benefit to the bus company be found in the fact that Gulf supplies it with electric current in its garages and shops, since the electricity is sold to Baton Rouge at Gulf's regular published rates.

in this case. And, as respondents' witnesses themselves point out, except for the joint office space and joint office personnel, the transportation system is operated as a self-contained unit, separate from the electric system. The relationship between the two companies is thus little different from the relationship between an electric utility enterprise and any other business supplying goods or services to the public. Although accounting and executive operations may be amalgamated and performed more cheaply than would be the case if the two enterprises were separately owned, as far as actually operating the business and providing its services are concerned, there is no relationship between the two companies. On the basis of the record before us, we cannot find that the operation of the Baton Rouge Bus Company is reasonably incidental or economically necessary or appropriate to the operation of Gulf's electric system. We conclude that it must be separated from the Engineers holding company system.

2. The Water Business

Gulf owns and operates a water business which serves three communities in Louisiana (Lake Charles, Denham Springs, and Carencro³⁹) and four communities in Texas (Orange, Navasota, Franklin and Calvert). The largest of these water properties, operating 57 of the company's 119 miles of water mains, are those at Lake Charles, which, according to respondents, represent an investment of \$830,000. Of an aggregate population of 44,450 in all these towns, 7,759 were

³⁹ The water properties at Carencro are owned by the city and leased by Gulf.

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water customers on December 31, 1940. The aggregate pumping capacity of all the water plants, as of that date, amounted to about 20,350,000 gallons daily. The annual sales amounted to 584,000,000 gallons in 1940.

In urging the retainability of these properties as "other businesses" the respondents claim that the water and electric systems are operationally related, that certain economies attend the use of joint personnel and facilities, and that it is difficult, if not impossible, to dispose of the water property without a substantial loss because the equipment used in water operations is located on the site of the electric equipment. The joint employees are engaged largely in supervisory, administrative or repair work.⁴⁰ The facilities which are actually used jointly by both departments are limited to occasional water testing apparatus, automotive and other nonoperational facilities. Aside from common ownership and the use of these limited joint employees and facilities, the water properties are operated as an independent enterprise. They are in no sense either an adjunct to or a by-product of the electric operations. The fact that Gulf's electric system supplies them with electric energy does not, as respondents admit, make the water business incidental to the electric business. In short, here, too, the "other business" is no more closely related to the operation of an electric system than any other business which supplies the consuming public with services or

products and uses the electric system's energy in its operations.

Respondents assert that the severance of the water properties will increase the expense of electric operations by requiring the electric system to support a number of employees who now derive a portion of their salaries from water operations. Assuming the relevance of this contention we cannot overlook the fact that the electric business is expanding and that the freed time of these employees will not be wasted. Nor can we ignore the effect on the proper functioning of the electric system which can be expected to accompany the undivided attention of the company's organization to electric operations.

Although within recent years Gulf has sold portions of its water properties, the respondents insist that with respect to the properties presently at issue the machinery used in the water business is so physically interspersed with the electric equipment that any order requiring the disposition of the water properties will also require the virtual scrapping of this machinery. The record before us, however, discloses that with respect to many of these very water properties the respondents have not felt this obstacle to be insurmountable and have commenced negotiations for their sale at one time or another within the past six years. Moreover, where the equipment is, in fact, so interspersed as to be incapable of being independently operated without being moved and so constructed as to be incapable of being moved, it is possible, as the president of Gulf pointed out, that an "arrangement may be worked out whereby this equipment can be sold and ease-

⁴⁰ In at least one case, Lake Charles, the respondents admit that the water plant personnel is, for the most part, different from the electric plant personnel.

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ment rights granted to the purchaser for use of the land on which it is situated for a reasonable period." An examination of the maps and other evidence introduced by respondents indicates that difficulties of disposition of this character may exist with respect to only one or two of the properties. While such difficulties may affect the length of the period within which the divestiture of these properties must be executed, they cannot be accepted as tests of the retainability of the properties. Accordingly, we cannot find that the water operations meet the requirements for retention as an "other business," and we must order their divestiture.

3. The Ice Business

[15] Ice is produced and distributed by Gulf in 9 communities in Texas (including the town of Alvin) which have a total population of 43,000. Although the aggregate capacity of the ice plants in these towns is about 225 tons per day, sales for 1940 totaled only 19,100 tons. In 7 other towns in Texas the company also owns ice vaults of which 6 were leased to local dealers.

Unlike Virginia's ice properties at Williamsburg, Gulf's ice operations are not designed to, and do not, assist in the operation of the electric business.⁴¹ On the contrary, although they were acquired together with electric properties and at present share joint facilities and employees with the latter, they have been operated primarily as a business of independent significance. As respondents' testimony makes clear, the business is in no way useful or necessary to the pro-

duction or distribution of electricity and is in no way a by-product thereof. Gulf has in the recent past sold many of its ice properties and at present is admittedly seeking to withdraw entirely from the business. The company's attitude is understandable in view of the fact that the ice business operates at a loss, even before depreciation is charged to its properties. Yet, it is contended that the physical difficulties of severance and the losses attendant thereon, when taken in conjunction with the fact that the electric operations will be required to absorb the entire expense of formerly joint employees and facilities, render the business reasonably incidental or economically necessary or appropriate to the operations of the electric properties. Not only do we find that respondents' claims in this connection are not valid, but, in view of the unprofitable character of the business, the lack of any substantial relationship to the ends of the electric business, and the advantages of having the Gulf organization concentrate its energies on the electric business, we find that continued retention of the ice business (including that at Alvin) is detrimental to the proper functioning of Gulf's electric system. We cannot find that the ice business is reasonably incidental or economically necessary or appropriate to the operations of the Gulf electric system. The ice properties, must, therefore, be severed from common control with Gulf's electric system.

4. The Steam Business

[16] The steam business conducted by Gulf consists largely of the sale of steam which is produced in connec-

⁴¹ Compare *supra*, at p. 82.

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tion with the generation of electricity at the company's Louisiana steam plant at Baton Rouge, to three large industrial customers located in the immediate vicinity. This plant was designed to burn gas, acid-sludge, coke and fuel (in almost any combination) some of which are obtained as waste by-products from the industrial establishments supplied with steam. During 1940, steam sales to industrial customers aggregated 10,102,000,000 of pounds and maximum demand amounted to 1,374,000 pounds per hour. Steam revenues during 1940 amounted to \$419,078. From its Sabine plant in Orange, Texas, Gulf supplies steam in small quantities to a near-by commercial enterprise, and receives small annual returns from these operations which rarely exceed \$1,000 and which are used to defray the expenses of operating the Sabine plant.

The record discloses further that the production of steam in respondents' electric generating plants, through the use of machinery specially designed to enable this combined operation, is both in intent and in fact integrally related to the production of electric energy. We, therefore, find that the steam business is reasonably incidental and economically appropriate to the operation of the electric system and may be retained as such.

5. The Merchandising and Jobbing Business

Gulf is engaged in the electric merchandising and jobbing business in connection with the promotion and sale of electric energy in the territory served with electricity (including the

town of Alvin), and in the gas merchandising and jobbing business in connection with the promotion of the sale of gas in the territory served with gas.

Gross revenues from the sale and rental of electric appliances amounted to \$747,141 in 1940, and according to respondents' books, net income totaled \$19,012. In 1940 the gas appliance business derived a gross revenue of \$82,996 from sales and rentals and a net income per books of \$4,990. However, if interdepartmental expenses had been allocated in accordance with the method proposed by Gulf for future operations, total income from both businesses would have been about \$3,800. There is evidence in the record which tends to show that the sales effected through these businesses have increased the consumption of gas and electricity.

The electric appliance merchandising business conducted by Gulf is, for the present purposes, not significantly distinguishable from that conducted by Virginia. From the record before us, and for the reasons previously adverted to,⁴² we find that it is economically appropriate to the operation of the retainable electric utility systems and may therefore be retained.

Although the record also discloses that the gas appliance merchandising business is reasonably incidental to the operation of Gulf's gas utility system, it is not, of course, so related to the electric system. Since the gas system, as we shall see, must be disposed of, the gas appliance merchandising business cannot be retained.

⁴² See discussion, *supra*, at p. 83 *et seq.*

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B. Additional Systems Sought to Be Retained by Engineers along with Gulf's Electric Utility System

1. Gulf Gas Properties at Baton Rouge

Gulf distributes natural gas to customers in Baton Rouge, Louisiana, and its suburbs, a territory of about 15 square miles in area with a population of 70,000. Its gas distribution system as of December 31, 1940, consisted of about 169 miles of main, 52 of which were low pressure system mains and 117 of which were intermediate pressure system mains. On January 1, 1941, there were 12,542 gas customers, 11,392 of whom were classed as residential and 1,150 as commercial and industrial. Gulf purchases the gas which it distributes from the Interstate Natural Gas Company, Inc., an unaffiliated company. In 1940 it bought 1,168,309,000 cubic feet and sold 1,114,578,000 cubic feet of gas.

The following figures indicate the size and earnings of the Gulf gas system at Baton Rouge in comparison with Gulf properties as a whole:

	Utility Plant Account as of Dec. 31, 1940	Operating Revenues for Year Ending Dec. 31, 1940	Net Income After Interest and Taxes for Year Ending Dec. 31, 1940
Gas system at Baton Rouge	\$1,676,152	\$638,711 a	\$128,806
Remainder of properties c	57,617,509	10,094,757 b	2,297,528
Total of Gulf properties c	59,293,661	10,733,468	2,426,334
Percentage gas system to total	2.8%	3.9%	5.3%

a Not including \$81,215 from sale of gas appliances.

b Not including \$745,642 from sale of electric appliances.

c See *supra*, p. 98 for a breakdown of these figures for the several properties.

We find that the gas properties of Gulf constitute an integrated public-utility system within the meaning of § 2(a)(29)(B). Their retainability as a system additional to Gulf's electric

system depends, of course, upon our finding that (A), (B), and (C) standards of § 11(b)(1) would be met by such retention.

It is obvious that the requirements of Clause (B) are met, since the gas properties operate in the same state as a large portion of the electric system.

We find further that the combination of the gas system and the electric system meets the standards of Clause (C). The gas service area, which is urban and industrialized, has a population of 70,000. The gas system's 12,542 customers (as of January 1, 1941) were all apparently also customers of the Gulf electric system. The service area of the gas system does not form an addition to the area of the electric system, since it coincides with a portion of it. The utility plant account of the gas system amounts to \$1,676,152 (as of December 31, 1940), and, when added to the electric utility plant account of \$55,070,226, increases the latter figure by only 3 per cent. Operating revenues of the gas system for the year ending December 31, 1940, were \$638,711 and,

when added to those of the electric system (\$9,740,739) increased the latter by 6.5 per cent. The net income of the gas system for the same period was \$128,806, and, when added to that of

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the electric system, (\$2,319,417) increased the latter by 5.5 per cent. The rates and services of the gas and electric systems in Louisiana are under the jurisdiction of the Department of Public Service. In Texas the company's electric rates are subject to the jurisdiction of municipal authorities, and both such rates and those in unincorporated towns and rural sections are subject to the authority of the state district court to declare unlawful an extortionate or unreasonable rate. It thus appears that the continued combination of the gas and electric systems is not so large in view of the state of the art and the area or region affected as to impair the advantages of localized management, efficient operation, and the effectiveness of regulation.

The question remains, however, whether the (A) standard would be met by the retention of the gas properties as an additional system.

Evidence on this point introduced by the respondents indicated that, if the gas business were owned and operated by an independent company, the increased costs to the gas company would amount to \$42,024, and the increased costs to the Gulf electric system⁴³ would amount to \$52,452, a total of \$94,476. Again we need not for present purposes adopt the contention of the Public Utilities Division that the "loss of substantial economies" in the (A) standard refers exclusively to economies lost to the additional system. Assuming *arguendo* that re-

spondents' interpretation of Clause (A) is correct—that the clause refers to economies lost to both the principal system and the additional system—we cannot find a loss of substantial economies.

A comparison of the loss which, it is stated, would be borne by the electric department—\$52,452—with its net income of \$2,319,417⁴⁴ indicates a loss of 2.3 per cent. A similar comparison with the electric department's gross income of \$3,529,091 indicates a loss of 1.5 per cent, and a comparison with the electric department's operating expenses of \$6,210,588 indicates an increase in expenses of less than 1 per cent. The asserted loss of economies to the principal system thus cannot be regarded as substantial. We, therefore, confine our discussion to an effort at finding the lost economies, if any, which would be suffered by the gas system alone under independent operation and to a determination of whether such losses would be substantial.

Respondents introduced an exhibit purporting to show "certain increased costs which would result if the gas properties and gas business (including sale of gas appliances) of Gulf States Utilities Company were owned and operated by an independent company." As previously indicated, the total of these increased expenses to the gas system, stated to be \$42,024, does not constitute lost economies arising from the independent operation of the gas system, since it ignores compensating

⁴³ The figures in the record on increased costs relate to those of the gas department, on the one hand, and to those of Gulf States Utilities Co. (minus its gas department), on the other hand. We assume, however, that it is substantially accurate to attribute to the

electric system the increased costs stated to accrue to Gulf as a whole (minus its gas department).

⁴⁴ See *supra*, at p. 98 for a breakdown of Gulf's net income.

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factors. These asserted losses represent 8.7 per cent of the gas department's operating expenses, 25.6 per cent of its gross income, and 32.6 per cent of its net income for 1940. We believe, however, that as estimates of lost economies they are in several respects overstated.

Respondents list an annual increase for executive salaries and supervisory services for the independent gas company over the present allocated cost of such salaries and services to the gas department of Gulf. As we indicated in our discussion of the Virginia gas properties,⁴⁵ the increase in executive salaries must be offset to some extent—if an indeterminate one—by the fact that the executives will devote all their time to the management of the gas company, in contrast to the slight proportion of time devoted to the gas department by the present Gulf executives.

The expenditure for continuous supervision by a company, such as the Stone & Webster Service Corporation, we regard as of doubtful necessity. It appears that virtually no independent gas company in the country makes use of such outside managerial supervision,⁴⁶ and we doubt whether the gas system, if divested by Gulf, need do so.

⁴⁵ *Supra*, at p. 76.

⁴⁶ Brown's Directory of American Gas Companies. The reference by the respondent to lower general and administrative expenses for one company with such a contract in comparison with another company without such a contract is not persuasive in the absence of a discussion of any number of other possible factors which might lead to this result.

⁴⁷ Among such other items are lost economies attributed to the operation of the gas merchandising and jobbing business, apart from the principal utility system. If such lost economies can, in fact, be expected, they are attributable, strictly speaking, not to the sep-

arate operations of the claimed increase in payroll for additional personnel (other than executive) allegedly necessitated by the separate operation of the gas properties convinces us that it is overstated by a substantial amount, and the figures presented for payroll taxes are correspondingly overstated.

Further, respondents estimated that an investment of \$95,000 will be required for land, building and equipment to be used as garage and shop facilities for a fleet of 22 motor vehicles, a laboratory room, a meter testing room, a storeroom, and a general desk space for supervisors and service men. The interest, taxes, and depreciation, they estimate, will cost \$11,160 annually, an increase of \$6,294 over the present allocated cost of such quarters to the gas property. Considering the nature and purposes of this building, these figures appear to us to be overstated.

Similar overstatements appear in a number of other accounts.⁴⁷ We note also that the method of allocating expenses between departments was revised by Gulf during the pendency of these proceedings, but that the basis for allocating expenses of joint employees suggested to Engineers by independent accountants was not fol-

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lowed, although it might admittedly have resulted in figures differing from those arrived at through the respondents' method. How such difference would affect the amounts which the respondents claim would be lost by divestment of the gas properties cannot, of course, be determined.

We must also consider a possible failure to take advantage of all available economies in the gas operation. As we indicated above,⁴⁸ competing gas and electric services under a single management may result in the suppression of one service in favor of the other. A personnel whose sole aim is the operation of a gas system may be able to tap sources of efficiency and economy which perhaps were overlooked when the system was managed jointly with a considerably larger and more remunerative electric system.

Weighing all these considerations, we cannot find that the economies lost through the operation of the gas system as an independent system would be substantial, and, therefore, we cannot make the finding under Clause (A) which is necessary for the retention of the gas properties with the Gulf electric system.

2. *Electric Utility Properties at Alvin, Texas*

[17] Gulf owns and operates an electric utility business, an electric

merchandising business and an ice business serving the city of Alvin, Texas, and vicinity, 112 miles from Beaumont, the nearest general office of Gulf. The Alvin electric system, principally a distribution system, is not physically connected with Gulf and is admittedly not economically capable of such interconnection. Electric energy for the distribution system at Alvin is purchased from the Houston Lighting and Power Company.⁴⁹ While the Alvin plant contains a 50-kilowatt engine-driven generating plant, it is used only for partial standby service. The energy is distributed over 62.67 miles of pole line serving, on September 30, 1941, 988 customers.

The electric plant account for the Alvin properties as of August 31, 1941, was \$227,174.06 and the ice plant account was \$33,138.49, a total of \$260,312.55.

A superintendent and staff at Alvin operate the property under the close supervision of a division superintendent at Navasota, Texas, and under the general supervision of the Beaumont office of Gulf, which furnishes such services as engineering, accounting, purchasing and new business, and handles such matters as customers' billing and accounting, rates, and taxes.

Gulf's income from electric, ice, and merchandising and jobbing at Alvin

This action was taken pursuant to a plan filed by National intended to effectuate in part our order directing the dissolution of National. Re *Electric Bond & Share Co. (1941) Holding Company Act Release No. 2962*; Re *National Power & Light Co. (1941) Holding Company Act Releases Nos. 3211, 3228*; Re *National Power & Light Co. (1942) Holding Company Act Release No. 3612*.

⁴⁸ See *supra*, at p. 85.

⁴⁹ The common stock of Houston Lighting and Power Company, which on August 31, 1941, was practically entirely owned by National Power & Light Company, a subholding company subsidiary of Electric Bond and Share Company, is now in the process of being exchanged for preferred shares of National at the rate of two shares of Houston's common for one share of National's preferred.

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for 1940 is stated by respondents as follows:

Revenues	\$78,963.22
Direct expenses	\$44,439.18
Direct taxes	5,513.00
	<hr/> 49,952.18
Balance	<hr/> \$29,011.04

The expenses do not include charges arising from costs of the company's general staffs for services they perform for Alvin.

We believe that the electric utility property at Alvin does not constitute an integrated public utility system within the definition of § 2(a)(29) (A). In pertinent part, that section defines an integrated public utility system as:

" . . . consisting of one or more units of . . . distributing facilities, whose utility assets . . . are physically interconnected or capable of physical interconnection and which under normal conditions may be economically operated as a single interconnected and coordinated system confined in its operations to a single area or region, . . . not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation."

An electric distribution system without generating or transmitting facilities may thus constitute an integrated public utility system, provided, of course, that it meets the other terms of the definition. However, considering the character of the operations at Alvin the electric utility property there does not in our opinion fall within the terms of the definition. The property is small, serving less than 1,000 customers. It is owned by Gulf

and depends for a number of its services on the Gulf organization and personnel. Nevertheless, it is 112 miles from Beaumont and is not interconnected with the Gulf system. It is completely surrounded by territory served by Houston Lighting and Power Company and depends upon that company for its electric energy.

Section 1(b)(4) of the act declares: ". . . that the national public interest, the interest of investors in the securities of holding companies and their subsidiary companies and affiliates . . . are or may be adversely affected . . . when the growth and extension of holding companies bears no relation to economy of management and operation or the integration and coordination of related operating properties."

Situations in which a property like Alvin, surrounded entirely by one system, on which it is completely dependent for electric energy, belongs to another system with which it has no operating or functional relationship appear to us to contravene the declared congressional policy. In view of our discussion here, we do not regard it as an integrated public utility system. It, therefore, cannot be retained by Gulf as an additional system.

3. *Electric Utility Properties at Jasper, Texas*

Gulf owns and operates an electric utility and an electric merchandising business serving the city of Jasper, Texas, and vicinity, 73 miles from Beaumont. The Jasper electric system is not physically connected with that of Gulf and is not economically capable of such interconnection. The electric plant account for the Jasper

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properties as of August 31, 1941, was \$234,786.41. Electric energy is furnished by a Diesel generating plant with a capacity of 848 kilowatts, and is distributed over a system of 35.13 miles of pole line. A superintendent and staff operate the property under the supervision of the Beaumont office of Gulf, which also furnishes such services as engineering, construction and maintenance, accounting, purchasing, and new business, and handles such matters as customers' billing and accounting, rates and taxes.

In May, 1941, the city of Jasper completed and placed into operation a municipal power plant using oil engine power and having a capacity of 550 kilowatts. On September 30, 1941, the municipal plant served 249 customers, all within the city limits, while the Jasper plant served 560 customers in the city and vicinity. This represents a decline of 182, or about one-fourth, of Jasper's customers from December 31, 1940, and it is expected that on this basis revenues, which in 1940 totaled \$57,311.06, would be reduced by about \$13,000 annually. According to Gulf "after the competitive situation has become stabilized, consideration will be given to the Jasper organization with a view to continuing it on a profitable basis."

We find that the electric utility property at Jasper constitutes an integrated public utility system within the meaning of § 2(a)(29)(A) and that, with Gulf as the principal system, it meets the (B) standard of § 11(b)(1) for an additional system.

⁵⁰ However, the record is devoid of any evidence that the losses of economies allegedly resulting from Gulf's divestment of its Jasper properties either will or will not be obviated by their acquisition by the city of Jasper.

Whether the (A) and (C) standards have been met, however, is not as clear. With respect to the former, Gulf estimates that if its Jasper property were ordered to be divested, a service contract and the addition of employees to provide the services formerly rendered by Gulf would cost \$7,800, which is stated to represent the loss of economies arising out of the independent operation of Jasper. On the other hand, on the record before us, and in view of the situation in which the Jasper property now finds itself *vis-a-vis* the municipal plant, we have doubts as to whether any economies accrue through the present retention of Jasper in the Gulf system.⁵⁰ In view of our further uncertainty on the present record as to whether economies will be lost on divestment or whether the retention of Jasper will meet the (C) standard, we believe that a fuller exploration of the questions is necessary. Accordingly, if Engineers selects Gulf as its principal system the record will be reopened for the admission of evidence on these points.

4. El Paso Electric Company

(a) Requirements of Clause (A) of § 11(b)(1)

As an additional system to Gulf's electric system respondent Engineers also seeks to retain the electric utility system owned by El Paso Electric Company (Texas), all of whose common stock is held by El Paso Electric Company (Delaware). The Delaware company, itself a subsidiary of Engineers, is a holding company owning, in addition to the securities of El Paso Electric Company (Texas), all of the capital stock of El Paso and Juarez

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Traction Company.⁵¹ El Paso Electric Company (Texas) operates an electric utility system and is also engaged in the street railway, bus, toll bridge, and merchandising businesses. El Paso and Juarez Traction Company is engaged in the street railway and toll bridge businesses. Their combined plant account, as of December 31, 1940, and their operating revenues, net operating revenues, gross income and net income for the twelve months ended that date were as follows:

connected with the hydrogenerating plant at Elephant Butte dam, New Mexico, 130 miles north of El Paso, by a transmission line built by the United States Bureau of Reclamation, there is no other electric system within a radius of several hundred miles. The electric system's 30,341 customers (as of December 31, 1940) were located in El Paso, Texas (population 98,000), Las Cruces, New Mexico (population 8,400), and 48 small

	Plant Account	Operating Revenues	Net Operating Revenues	Gross Income	Net Income ^a
Electric	\$12,301,947	\$2,782,918	\$926,971	\$918,680	\$438,924
Street Railway	1,788,725	281,621	.....	.....	.....
Bus	295,906	251,759	85,153	81,975	72,481
Toll Bridge	339,020	141,237	.....	.....	.....
Total	\$14,725,598	\$3,457,535	\$1,012,124	\$1,000,655	\$508,082 ^b

^a Based on El Paso's proposed new method of allocating interdepartmental expenses.

^b Including a deficit of \$3,323 from appliance merchandising operations.

The electric system owned and operated by El Paso (Texas) serves an estimated population of 169,000 living in an area of approximately 700 square miles. This area is located in the Rio Grande valley at the extreme western end of Texas and the southeastern part of New Mexico and covers a narrow strip of territory approximately 220 miles long and rarely more than 5 miles wide, extending from Arrey, New Mexico, southeast to El Paso, Texas, and continuing southeast to Gills Ranch, Texas. The region served is surrounded by mountains and desert and is geographically isolated from any other population centers. While, since December, 1940, the El Paso system has been inter-

towns and settlements, the majority of which have a population under 250.

Electric power is generated in two steam plants having an aggregate capacity of 56,000 kilowatts. However, because of certain limitations on the boiler capacity of the main plant, the Rio Grande steam plant, the system's aggregate generating capacity is reduced to an actual capacity of 42,500-45,000 kilowatts. The other substantial plant in the system, a steam plant located at Santa Fe, has a present generating capacity of 12,500 kilowatts but is used principally as a reserve plant. It operated about 14.5 per cent of the time in 1940 and generated 3,500,000 kilowatt hours as compared with a net of 154,665,000 kilowatt hours generated by the entire system.

The distribution system, as of December 31, 1940, included 275 miles

⁵¹ In December, 1940, Mesilla Valley Electric Company, a subsidiary of El Paso (Delaware), was merged with, and its properties taken by El Paso (Texas). Re El Paso Electric Co. (1940) 8 SEC 366, 37 PUR(NS) 65

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of pole lines of 6.6 kilovolts and over 757 miles of pole lines of less than 6.6 kilovolts. With the exception of the electric utility properties serving the city of Sierra Blanca, Texas, and vicinity and the city of Van Horn, Texas, the system's properties are entirely interconnected. Sierra Blanca is approximately 20 miles from the main electric system of the company, and the energy at that point is presently obtained from a small internal combustion plant. On the basis of an increased load, which respondents anticipate, at Sierra Blanca, the properties located there are now being interconnected with the main El Paso system. We find that, with the exception of the Van Horn properties, El Paso's electric utility properties constitute an integrated public utility system within the meaning of § 2(a)(29)(A) of the Public Utility Holding Company Act.

In urging that the integrated electric utility system of El Paso (Texas) is retainable by Engineers along with Gulf's electric system under the standards of Clause (A) of § 11(b)(1),⁵² the respondents assert that the requisite substantial economies which may be obtained by combining El Paso with Gulf consist of savings of \$50,700 annually in the operation of the two companies.⁵³ These savings are computed by subtracting from the estimated cost of providing assertedly necessary supervisory assistance and services to both companies, if independent, the estimated cost of these services if the

companies are under common control. As in the case of the Virginia-Savannah combination, this hypothetical comparison is indulged because respondents claim that it would not be practicable for the present service company to perform services for properties as small as the largest possible combination of Gulf and El Paso. And, also, as in the case of Virginia and Savannah, these savings occur not in the physical, day-to-day operation of the properties but largely in the administrative, accounting, and financial conduct of the business. Moreover, the utilization of such services which are for the most part supervisory or consultative in character, might well be found in any two separately operated, but commonly controlled, similar businesses. These alleged values of common control were, as we have said, repeatedly called to the attention of Congress during the consideration of the Holding Company Act.

Though respondents' estimates are in terms of expense rather than ultimate economy, if we accept their figures the economies asserted as substantial amount to \$50,700 (\$12,000 of which is allocable to Gulf, \$32,800 to El Paso, and the remainder to the Baton Rouge Bus Company). In their 1940 electric operations the two public utility companies produced net incomes, respectively, of \$2,319,417 and \$438,924, gross incomes, respectively, of \$3,529,091 and \$918,680, and had operating expenses, respec-

⁵² This combination has already been found not inconsistent with the requirements of Clause (B). *Re Engineers Pub. Service Co.* (1941) 40 PUR(NS) 1.

⁵³ Although it is also claimed generally that the retention of the two companies under En-

gineers' control will facilitate obtaining equity money for the subsidiaries through Engineers, the history of this system furnished no support for the claim and the record does not sustain the allegation.

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tively, of \$6,210,587 and \$1,855,947. Expressed percentagewise, the loss of economies claimed to accompany separation would represent .5 per cent of Gulf's net and .3 per cent of Gulf's gross income from electric operations and 7.4 per cent of El Paso's net and 3.6 per cent of its gross income from electric operations. Or put another way, the respondents' claims would reflect an increase in operating expenses of .2 per cent to Gulf's and 1.8 per cent to El Paso's electric system.⁶⁴ In view of the background and meaning of the congressional requirement that the loss in economies, resulting from the severance of a utility system from a holding company system, must be substantial, we cannot find that the combination of Gulf's and El Paso's electric systems is permissible under the standards of Clause (A), even if we accept these hypothetical figures as the exclusive criterion.

When it is considered that the economies of common control are not in fact as substantial as those claimed, this conclusion is strengthened. In the first place, the extent of the economies must be reduced because these estimates include savings in the operation of transportation properties which must be separated from the holding company system. Moreover, since we must reject respondents' contention that all the proposed additional executive assistance is necessary and that none of the functions to be performed by these experts can be efficiently performed by the present operating executives, the economies claimed are further diminished. Not only are

these contentions not borne out by the record, but the testimony of the treasurer of El Paso, L. F. Yetman, indicates that, given the opportunity, the operating executives can perform many of the functions contemplated for the additional experts. And when the cost of obtaining the additional services claimed to be necessary is examined, it is found to be less than is claimed.

For example, serious doubts arise as to the necessity and alleged cost of all the assertedly necessary expert assistance when we consider respondents' statement that "such reinforcement would be needed without material change regardless of whether the present gas operations are continued in the system and irrespective of the disposition of the incidental businesses of the various companies." The accuracy of an estimated expense of personnel, which will not be diminished when the scope of the operations of the enterprise is considerably reduced, is at least suspect. And further doubt is cast upon the accuracy of these estimates when we consider that the salaries proposed to be paid to the allegedly necessary expert assistance for the entire requirements of the Virginia-Savannah and Gulf-El Paso-Baton Rouge combinations are almost the equivalent of the salaries presently paid to the experts of the mutual service company for performing roughly equivalent services for the entire Engineers system.

On the record before us, therefore, it is clear that the economies—if any—which will be lost on separating the two electric utility systems are not such as would justify the retention of El Paso by Engineers along with Gulf.

⁶⁴ These figures are based upon the proposed methods of allocating interdepartmental expenses.

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under the standards of Clause (A) of § 11(b)(1).

(b) Requirements of Clause (C) of § 11(b)(1)

For the El Paso electric system to be retained by Engineers along with Gulf it is also necessary, as we have pointed out in connection with the Virginia-Savannah combination, that, in addition to the standards of Clause (A) of § 11(b)(1), those of Clause (C) be met.

As has already been indicated, geographical considerations, among others, are involved in determining whether a combination is permissible under this clause. Gulf's service area of some 27,000 square miles is, as has been shown, located in southwest Louisiana and southeast Texas. 92.2 per cent of the 270 communities served have a population of less than 2,500. Aside from a few larger centers, such as Baton Rouge, Beaumont, Port Arthur, and Lake Charles, the service area is essentially rural. Although the region's economic characteristics are predominantly agricultural and pastoral, the production, refining and distribution of oil and gas furnish an important electric load.

El Paso serves an area of some 700 square miles in the Rio Grande Valley in western Texas and southeast New Mexico. Except for the city of El Paso, the system's service is confined to a narrow valley surrounded by mountains and desert, which is also largely pastoral in its economic character.

Between the Gulf and El Paso electric systems there is no operating relationship. Between their service areas there is not much intercourse and

little in common geographically, politically, or economically. The two areas served are 500 miles apart at their closest points and almost 1,000 miles apart at their furthest points. Seven hundred and fifty miles separate the principal offices of each. In many ways the two systems are even further apart than Virginia and Savannah. Accordingly, it is even more apparent that an executive staff in Beaumont is not "localized management" as far as El Paso's needs are concerned. Although Beaumont is closer to El Paso than New York, we cannot find, in view of the distance and differences between the two regions served, that the removal of the management to Beaumont from New York will so materially alter its sensitivity to El Paso's problems as to afford for the population of El Paso's service area the advantages of localized management. We cannot find from the record before us that the combination of Gulf and El Paso is not so large as to impair the advantages of localized management.

In applying the standards of Clause (C) we are also enjoined to have regard to the effect of the size of the combination on the effectiveness of regulation. Not only are El Paso's properties separated by about 700 miles from Gulf's but the combination is scattered over three states. While the Louisiana and New Mexico properties are subject to regulation by the respective Public Service Commissions of the two states, in Texas the properties are not regulated by a state agency. Regulation of these latter properties depends upon the municipalities served and the state district courts. Therefore, the combination presently

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proposed would be subject to regulation by Louisiana and New Mexico state agencies and by each of the widely separated Texas communities in which it performs service. But most of the properties of the combination do not come within the competence of a small number of local agencies. Nor are they even divided between two state regulatory agencies. That a combination which can be locally regulated only by so scattered and diverse a group of regulatory bodies is not so large as to impair the effectiveness of regulation is at least questionable.

The record before us does not sustain a finding that the combination here proposed meets the standards of Clause (C) of § 11(b)(1). Since Engineers' retention of El Paso (Texas) along with Gulf cannot be permitted under § 11(b)(1), we must order Engineers to dispose of all its interests, direct and indirect, in El Paso (Texas).

Before leaving the problem of Clause (C) it is not inappropriate to comment on another of respondents' contentions. It is urged that because the combined electric plant account of Gulf and El Paso is not so large as that of Virginia, which we have found to be a single integrated electric utility system, the *combination* cannot be "so large . . . as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation." But in determining this question, we must consider the "state of the art and the area or region affected." While the area or region affected by Virginia may be such as not to render Virginia's size unduly large, it does not mechanically follow that a combination which is

smaller in the magnitude of its financial operation is not, in another area or region, so large as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation. To accede to respondents' argument would lead to the conclusion that any combination whose financial magnitude is smaller than any public utility which we have found to constitute an integrated system must ipso facto be not so large as to violate the (C) standard. The statute cannot be so construed.

[18] Since the electric utility system of El Paso (Texas) is part of the holding company system of El Paso (Delaware), a registered public utility holding company, and a respondent in this proceeding, we will later in this opinion consider the other businesses sought to be retained by El Paso (Delaware) along with this electric system under the standards of § 11(b)(1). At this point, however, it is appropriate to examine whether any integrated public utility systems may be retained by El Paso (Delaware) in addition to El Paso's (Texas) integrated electric utility system.

El Paso (Texas) owns and operates an electric utility system serving approximately 200 customers in the town of Van Horn, Texas, and vicinity. The territory actually served is small and is devoted almost exclusively to cattle raising and dry farming. The town itself is little more than a trading post for ranchers in the area. Located approximately 30 miles from Sierra Blanca and 40 miles from the main El Paso electric system, the Van Horn system is isolated by desert and admittedly is at present not economically capable of interconnection with

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either Sierra Blanca or the main electric system. A local superintendent and staff, who occasionally are assisted by the production, distribution and engineering personnel of El Paso (Texas), operate the system, which generates its own energy from a Diesel plant with a capacity of 357 kilowatts.

Since, as respondents admit, Van Horn is neither interconnected nor at present economically capable of being interconnected with the El Paso properties, it cannot be a part of El Paso's integrated utility system. However, we find that the electric properties of Van Horn themselves constitute an integrated public utility system within the terms of § 2(a)(29)(A) of the act. We find, further, that this system may be retained by El Paso in addition to that company's electric system under the standards of § 11(b)(1). Although the record is not as clear as it might be on this point, it discloses that material savings are effected by the combination of El Paso and Van Horn. Substantial economies within the meaning of Clause (A) would be lost if the two systems were separated. Since Van Horn is located in the same state as El Paso it meets the standards of Clause (B) for retention as an additional system. And, in view of the small size of Van Horn and its close geographical proximity to El Paso's other properties, the combination also meets the standards of Clause (C).

5. *The Other Businesses of El Paso*

This record contains no evidence from which we can conclude that El Paso's "other businesses" are reasonably incidental or economically neces-

sary or appropriate to the operation of Gulf's electric system. Accordingly, in so far as they are sought to be related to Gulf's electric system, these businesses must be severed from Engineers' holding company system. However, as we indicated above, since these other businesses are conducted as part of the operations of the holding company system of El Paso (Delaware), which is itself a registered holding company and a respondent in this proceeding, it is appropriate to define the limits of these operations under the standards of § 11(b)(1) as applied to the El Paso (Delaware) holding company system. We have already noted that, in addition to the integrated electric utility system of El Paso (Texas), this holding company system may retain the integrated electric utility system at Van Horn, Texas. We now turn to the other businesses conducted by this system.

(a) *The Transportation and Toll Bridge Businesses*

El Paso Electric Company (Texas) (hereinafter sometimes referred to as the Electric Company) owns and operates a street railway and bus system in El Paso and vicinity and operates the street railway system owned by El Paso and Juarez Traction Company which serves Juarez, Mexico. In addition, these companies own two international toll bridges over the Rio Grande river between El Paso and Juarez; the American halves are owned by the Electric Company and the Mexican halves by El Paso and Juarez Traction Company. The Electric Company operates the railway and bridge properties owned by its associate, El Paso and Juarez Traction

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Company, under a contract dated January 3, 1911.

Owning 34 street cars which are operated on 3 railway lines over 18 miles of track, the Electric Company furnishes the rolling stock, men, and material for the operation of the street railway line and the toll bridges, and the necessary personnel and materials to keep all records and accounts for both. During the year 1940, the cars traveled 803,000 miles (including 97,000 on the El Paso and Juarez Traction Company properties) and carried 5,319,400 passengers (of which 1,242,400 were allocated to El Paso and Juarez Traction Company). The Electric Company also operated 47 busses on 9 bus lines solely in El Paso and vicinity over 33 miles of bus route. During the year 1940 the busses traveled 1,292,000 miles and carried 4,251,000 passengers.

Respondents claim that these transportation operations are reasonably incidental or economically necessary or appropriate to the operation of the Electric Company's utility system. The common origins and development of the electric and transportation properties, the joint use of certain personnel⁵⁵ and facilities, and the profitable character of the bus and railway operations do not, as we have already indicated, render the transportation business reasonably incidental or economically necessary or appropriate to the operations of the electric system, nor do they make retention of the transportation properties necessary or appropriate in the public interest or for the protection of investors or consumers. Indeed, the record

shows that most of these very factors have in the past been conducive to practices which were contrary to the interests of investors and consumers and detrimental to the proper functioning of the electric system. Thus, the fact that portions of the company's property, more properly allocable to railway operations, have been carried in the electric plant account, the fact that depreciation reserves have not been segregated between departments, and the fact that expenses have been improperly allocated between the two departments—e. g., the transportation department has been inadequately charged for the electricity furnished it by the electric department—have conflicted with the best interests of the electric investors and consumers.

Although the fact that free transportation is extended to certain electric system employees may be relevant in resolving the present question, it is not persuasive here because the record discloses that the portion of the transportation department's efforts devoted to this end is insignificant. While this service is of assistance in the operation of the electric system, its continuance or elimination would not affect the essentially independent character of the transportation operations. And, as the record all too clearly shows, no substantial relationship exists between the actual operations and problems of the two businesses.

Respondents claim that if the transportation properties are severed the electric business will sustain a loss because it will be required to absorb many expenses of joint facilities and employees now borne by the former. But the record does not support the

⁵⁵ Most of this personnel engages in supervisory, clerical, and administrative work.

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loss claimed, particularly with respect to compensating electric employees for the loss of free transportation. And, in evaluating the asserted losses we must remember that the expanding electric operations will absorb a portion of the freed labor facilities. Moreover, the advantages of having the undivided attention of the company's executives devoted exclusively to electric operations must also be considered in appraising this claim. We believe that the public interest will be better served if the wholehearted attention of the personnel is devoted to the electric service, even though some losses may occur in initially adjusting to separate ownership.

Accordingly, we cannot find that the transportation and toll bridge properties of El Paso (Texas) and El Paso and Juarez Traction Company are reasonably incidental or economically necessary or appropriate to the operation of El Paso's (Texas) electric utility systems, and we must order their divestment.

(b) *The Electric Appliance Merchandising Business*

El Paso (Texas) is engaged in the electric appliance merchandising business in connection with the promotion of sales of electric energy in the territory served. Gross revenues from the sale and rental of electric appliances in 1940 were \$330,140. On the company's books these operations returned a net income in 1940 of \$5,460. However, if interdepartmental expenses were more properly allocated this busi-

ness would have sustained a deficit of \$3,323. Like the similar enterprises in the Virginia and Gulf systems, the record shows that these operations have resulted in some increase in the sale of electric energy and are not unrelated or economically inappropriate to the electric operations. We find, therefore, that this business is reasonably incidental to the conduct of El Paso's (Texas) electric system and is, therefore, retainable.⁵⁶

C. Conclusion

Engineers must divest itself of all interests, direct and indirect, in El Paso (Texas), El Paso (Delaware), El Paso and Juarez Traction Company, Baton Rouge Bus Company, and the gas utility system, the gas appliance merchandising business, the ice and water properties and the Alvin electric properties of Gulf. Moreover, of course, if Gulf is to be Engineers' principal system, Engineers must also divest itself of all interests, direct and indirect, in Virginia and Savannah.

Under any circumstances El Paso Electric Company (Delaware) must divest itself of all interests, direct and indirect, in El Paso and Juarez Traction Company and the transportation and toll bridge properties of El Paso Electric Company (Texas).

III. *Common Stock of El Paso Natural Gas Company*

Engineers owns and holds a block of 51,357 shares of the common stock of El Paso Natural Gas Company (hereinafter referred to as the "Natural

⁵⁶ The evidence in this record will not, of course, sustain a finding that El Paso's non-utility businesses are reasonably incidental or economically necessary or appropriate to the operations of Gulf's electric utility system.

Accordingly, since El Paso's electric system must be severed from common control with Gulf, these businesses will also have to be eliminated from Engineers' holding company system.

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Gas Company"), representing 8.5 per cent of that company's outstanding voting securities. The Natural Gas Company is not a subsidiary of Engineers⁵⁷ but is an affiliate by virtue of Clauses (A) and (B) of § 2(a)(11) of the act. The record before us does not disclose any further affiliations between the two companies.

Although there is some question as to whether the Natural Gas Company is a public utility company within the definition of § 2(a)(4) of the act, as we view the case these securities cannot be retained by Engineers regardless of how that question is answered. If the Natural Gas Company is not a public utility these shares can only be retained on the theory that they are an interest in an "other business" which is reasonably incidental or economically necessary or appropriate to the operation of any of Engineers' retainable integrated utility systems. But the respondents have introduced no evidence addressed to the retainability of this interest as an "other business." Therefore, if the Natural Gas Company is a nonutility business we are unable, on the record before us, to find that Engineers' retention of an interest therein is reasonably incidental or economically necessary or appropriate to the operations of any retainable integrated utility system.

If, on the other hand, the Natural Gas Company is a public utility we must also conclude that divestment is

necessary. These securities, as we have indicated above, would then represent no more than an investment interest in a nonsubsidiary. We doubt whether, particularly under the circumstances of this case, such an investment interest in a utility company may be retained as an additional integrated utility system. And, in any event, no evidence on this point was presented. Nor may these securities be retained as an interest in an "other business" which is reasonably incidental or economically appropriate to the operations of a retainable integrated utility system. As we have indicated above, there is no evidence in the record to show that retention of these securities would meet the standards of the "other business" clauses.⁵⁸

It may also be noted that the argument of counsel in this case points to the conclusion that under no circumstances can an interest in a nonsubsidiary utility be retained under the "other business" clauses. In discussing the relationship of the second "other business" clause to the first clause, Engineers' counsel, both in oral argument and in their brief, strenuously urged that "the second clause is explanatory of the first." We have indicated above⁵⁹ that we agree that the two clauses must be read together and that the factors listed in the second clause are to be examined in determining whether the interest sought to be retained is "reasonably incidental or economically necessary or

⁵⁷ Section 2(a)(8) of the act. No proceeding has been instituted under paragraph (B) of that section to determine whether or not the Natural Gas Company should be subject to the obligations, duties, and liabilities of a subsidiary of a registered holding company.

⁵⁸ Under § 11(b)(1) it is, of course, incumbent upon the respondents to make out a

case for the retainability of each of the systems and each of the other businesses which they may seek to retain. No additional system or investment interest is prima facie eligible for retention by a public utility holding company under § 11(b)(1). Cf. Sections 1(c) and 11(a).

⁵⁹ Pages 74-76.

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appropriate to the operations" of retainable integrated systems. In this view of the matter, the parenthetical clause in the last sentence of § 11(b) (1)⁶⁰ would have to be considered in determining whether a business is reasonably incidental or economically appropriate. And that clause excludes from the category of reasonably incidental and economically appropriate "other businesses" an interest in the business of a public utility company as such. Accordingly, interests in non-subsidiary utilities could not be retained as "other businesses." We believe that this conclusion has much to support it and that it is strengthened by an examination of other provisions of the act, particularly § 10(c)(2). Under that section Engineers could not acquire this interest in the Natural Gas Company (as an interest in a utility company) without an affirmative showing that such acquisition would serve the public interest by tending towards the economic or efficient development of an integrated public utility system. There is, however, no need to determine this question at this time since, even if the construction that nonsubsidiary utilities might be retained as other businesses were adopted, respondents' failure to introduce any evidence on this point precludes the retention of these securities.⁶¹

IV. *Engineers Public Service Company, Inc.—The Mutual Service Company* Engineers Public Service Company,

Inc. (hereinafter referred to as Engineers, Inc.), the mutual service company in Engineers' holding company system, has in the past rendered advisory and consultative services to all the companies in the system.

The service company has 20,000 shares of \$5 par value capital stock outstanding. These shares are held by the subsidiaries in Engineers' system, substantially in the proportion that their annual gross revenues bear to the total annual gross revenues of the system companies serviced by Engineers, Inc. Although none of its shares are held directly by Engineers, it is, of course, indirectly a subsidiary of the holding company.

Respondents have stated that, if the system is reduced in its operations to the largest possible aggregation of properties permissible under the standards of Clause (B), it would not be practicable for the service company to continue to render the services which it has offered in the past. And in their testimony they have admitted that if Engineers were limited to the retention of only one company between Virginia and Gulf it would likewise not be practicable for the service company to continue to render services in the system. Moreover, in urging their case for the retention of additional systems under the standards of Clause (A), respondents have based their contentions on the assumption that the present service company would not continue to perform services for those

⁶⁰ The sentence provides:

"The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public-utility systems the retention of an interest in any business (other than the business of a public-utility company as such)" (Italics supplied.)

⁶¹ In disposing of a petition for rehearing in the United Gas Improvement Case, we pointed out that some question had been raised as to the soundness of the view, previously expressed in that case, that an investment interest in a utility is retainable where the standards of the "other business" clauses are satisfied. Re The United Gas Improv. Co.

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companies in the system which Engineers might be permitted to retain. We agree with respondents that for the one electric utility system and its incidental businesses to which we have found that Engineers' holding company system must be reduced, it would be, to say the least, impractical to retain the present service company.⁶² We, therefore, find that the retention of Engineers, Inc., is not reasonably incidental or economically necessary or appropriate to the operations of Engineers' holding company system as limited by our order. Accordingly, we must order the separation of this company from the Engineers holding company system.

V. Summary of Conclusions

Under the statute Engineers must limit its operations to the electric utility system, the electric appliance merchandising and jobbing business, and the ice business of Virginia. Engineers will, therefore, be ordered to sever its relationship with the companies, properties, and businesses named hereafter, by disposing or causing the disposition, in any appropriate manner not in contravention of the applicable provisions of the act or the rules, regulations, or orders promulgated thereunder, of its interest, direct and indirect (including the ownership, control or holding of securities), in Savannah, El Paso (Delaware), El Paso (Texas), El Paso and Juarez Traction Company, Baton Rouge Bus Company,

El Paso Natural Gas Company, Engineers, Inc.; the gas utility system, the gas appliance merchandising and jobbing business and the transportation properties of Virginia; and the water business, the ice business, the gas utility system, and the gas appliance merchandising business of Gulf.

In addition, if Virginia's electric utility system is to be Engineers' principal system, Engineers will be ordered also to divest itself or cause the divestment in an appropriate manner of its interest, direct and indirect, in Gulf; and, if Gulf's electric utility system is to be Engineers' principal system, Engineers will be ordered to divest itself or cause the divestment in an appropriate manner of its interest, direct and indirect, in Virginia. Our order will require that Engineers divest itself of its interest in Gulf, but within fifteen days of the entry of our order Engineers may petition this Commission for leave to retain Gulf's electric utility system as its principal system.

El Paso (Delaware) must limit its operations to the electric utility systems of El Paso (Texas) in the Rio Grande river valley and at Van Horn and to the electric appliance merchandising and jobbing business of El Paso (Texas). El Paso (Delaware) must therefore divest itself or cause the divestment, in any appropriate manner, of its interests, direct and indirect (including the ownership, control, or holding of securities), in El Paso and Juarez Traction Company

(1942) Holding Company Act Release No. 3511. However, there too we found it unnecessary to decide the point since, in any event, the record would not have permitted a finding that retention of the interest in question met the standards of the "other business" clauses.

⁶² Moreover, serious questions may arise under §§ 13 (b) and (d) if Engineers, Inc., which is presently equipped to perform services for the entire holding company system of Engineers, confines its activities to the performance of services for Engineers' one retainable system.

RE ENGINEERS PUBLIC SERVICE CO.

and the transportation and toll bridge properties of El Paso (Texas).

An appropriate order will issue.

Appendix

At the time of its registration, February 21, 1938, Engineers, which was incorporated in Delaware in 1925 and has had its principal offices in New York city, controlled gas and electric utility companies which served widely scattered sections of the country. Electric service was furnished by Virginia Electric and Power Company in Virginia and North Carolina; by Savannah Electric and Power Company in Georgia; by Gulf States Utilities Company in Louisiana and Texas; by El Paso Electric Company (Texas) and Mesilla Valley Electric Company in Texas and New Mexico; by The Western Public Service Company and its subsidiaries in Wyoming, South Dakota, Nebraska, Colorado, Kansas, Missouri, and Iowa; by Puget Sound Power & Light Company in Washington; and by The Key West Electric in Florida. None of the electric utility properties of any of these subsidiaries was interconnected or economically capable of interconnection with those of any other such company (with the minor exception of two small subsidiaries of The Western Public Service Company which had properties interconnected with those of their parent company). Gas service was rendered in Virginia, Louisiana, and Washington by the subsidiaries which rendered electric services in those states. The executive offices of Engineers, in New York city, were separated from the areas served by its electric and gas utility subsidiaries by distances ranging from 375 miles to 3,100 miles.

The entire holding company system used and bore the cost of service furnished by Engineers Public Service Company, Inc., a mutual service company organized and having its executive offices in New York.

In addition to these gas and electric facilities, the subsidiary companies in Engineers' system were engaged in various nonutility businesses and had interests in other businesses. Thus, they operated bus and street railway systems, toll bridges, ice, and cold storage plants and various water, steam, and telephone enterprises in fourteen states and in Canada. Moreover, many of these subsidiaries were engaged in the sale of electric and gas appliances in connection with their electric and gas businesses.

On February 28, 1940, we instituted this proceeding by order and notice [Holding Company Act Release No. 1945] under § 11(b)(1) of the Public Utility Holding Company Act of 1935 to determine what action was necessary to limit the operations of the Engineers system to a single integrated public utility system, to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system; and to the control of such additional integrated public utility systems as meet with the standards of § 11(b)(1).

Respondents filed an answer on April 5, 1940, and on May 23, 1940, they moved to dismiss the proceeding on the ground that no preliminary report of studies by the Commission under § 11(a) or § 30 of the act had been rendered to respondents in respect of their holding company system. In that connection respondents contend-

SECURITIES AND EXCHANGE COMMISSION

ed, among other things, that our notice and order were improper because, in their failure to specify in what respects such system did not comply with the standards of § 11(b)(1), they did not tender specific issues for hearing and therefore cast an undue burden on the respondents. Construing the motion to dismiss as in effect a request for a statement setting forth our tentative views as to what action is necessary to bring about compliance by the respondents with § 11(b)(1) (Re Engineers Pub. Service Co. [1940] 7 SEC 371), we directed the Public Utilities Division to prepare a report of their studies of the Engineers system to aid us in arriving at tentative conclusions, and postponed the hearing herein pending the preparation of our statement and to afford the respondents sufficient time to prepare for hearing on the basis thereof.

Studies of the respondents' system having been made and reported to us by the Public Utilities Division [See report in this matter dated March 5, 1941, as corrected April 15, 1941, and released to the public], we issued a statement of our tentative conclusions on March 11, 1941 [Statement of Tentative Conclusions of the Commission and Order Reconvening Hearing, Holding Company Act Release No. 2607, 37 PUR(NS) 263, 268]. At the same time we ordered a hearing to be held before us on March 25th and directed the respondents to show cause why we should not forthwith issue an order requiring respondent, Engineers Public Service Company, "to divest itself of its interest in all subsidiaries, except: Virginia Electric and Power Company and Savannah Electric and Power Company; or, Gulf

States Utilities Company, El Paso Electric Company (Delaware), and Baton Rouge Bus Company, Inc."

Hearings were held in accordance with that order and on July 23, 1941, we issued our findings and opinion and an order requiring Engineers to divest itself within one year of that date of its direct and indirect interest in securities of Puget Sound Power & Light Company and its subsidiaries and The Key West Electric Company. Moreover, although in our findings and opinion, that day issued, we found that it was also necessary for Engineers to divest itself of all its interest in The Western Public Service Company, a Maryland corporation, we held in abeyance our order to that effect for reasons therein stated (Re Engineers Pub. Service Co. Holding Company Act Release No. 2897, 40 PUR(NS) 1). In that opinion, too, we disposed of respondents' contentions that evidence as to the constitutionality of § 11(b)(1) could be introduced and that that question be considered in this proceeding.

On July 31, 1941, we ordered the hearing reconvened for the taking of evidence on the other issues in the proceeding, which we had in a general way delineated in our findings and opinion of July 23, 1941, *supra*.

Subsequently, The Western Public Service Company, a Maryland corporation, was dissolved and its Nebraska and South Dakota properties were sold. The residual properties of The Western Public Service Company, a Maryland corporation, are now owned by The Western Public Service Company, a Delaware corporation, The Northern Kansas Power Company, and Missouri Service Company. All

RE ENGINEERS PUBLIC SERVICE CO.

securities of these last three companies are owned directly by Engineers Public Service Company, and Engineers has consented to an order requiring that it divest itself of these securities within the time prescribed in § 11(c). (Re The Western Pub. Service Co. [1941] Holding Company Act Releases No. 3230, 3245, 43 PUR(NS) 395). Accordingly, as we have stated in the text, there remained for our decision at this time only the questions relating to the appropriateness of Engineers' retention of certain additional systems and incidental businesses in the event that it chooses as its principal system either Virginia or Gulf.

On October 14, 1941, in reply to respondents' request that a trial examiner's report be filed in this proceeding before we determine the remaining issue, we held that such a report is not necessary and we ordered that within thirty days after the closing of the record the Utilities Division was to file its request for specific findings of fact and a supporting brief and that within fifteen days thereafter the respondents were to file their requests for specific findings of fact and a supporting brief. (Re Engineers Pub. Service Co. [1941] Holding Company Act Release No. 3075, 40 PUR(NS) 325.) These requests for findings and supporting briefs having been filed, oral argument was had before us.

ORDER

The Commission having on February 28, 1940, by notice and order for hearing, instituted proceedings under § 11(b)(1) of the Public Utility Holding Company Act of 1935 with respect to Engineers Public Service

Company and its subsidiaries to determine their status under that section, and Engineers Public Service Company and its subsidiaries having answered such notice and order; and

Hearings having been held after due notice, requests for findings of fact on behalf of such companies and briefs in support thereof having been filed, oral argument having been heard; and

The Commission being advised in the premises, and having this day issued its findings and opinion with respect to certain action which the Commission finds necessary to limit the operations of the holding company systems of Engineers Public Service Company and its subsidiaries, including each subsidiary thereof which is a registered holding company and its subsidiaries, to a single integrated public utility system and additional systems and other businesses in accordance with the requirements of § 11(b)(1) of the Public Utility Holding Company Act of 1935;

It is *ordered*, pursuant to § 11(b)(1):

1. That Engineers Public Service Company, a registered public utility holding company, shall sever its relationship with the companies named hereafter by disposing or causing the disposition, in any appropriate manner not in contravention of the applicable provisions of the said act or the rules, regulations, or orders promulgated thereunder, of its direct and indirect ownership, control, and holding of securities issued and properties owned, controlled, or operated by the following companies:

Savannah Electric and Power Company, Gulf States Utilities Company, Baton Rouge Bus Company, Inc., El

SECURITIES AND EXCHANGE COMMISSION

Paso Electric Company (Delaware), El Paso Electric Company (Texas), El Paso and Juarez Traction Company, El Paso Natural Gas Company, Engineers Public Service Company, Inc.; and

2. That the said Engineers Public Service Company shall cease to own or operate, directly or indirectly, any property or facilities now owned or operated by it through Virginia Electric and Power Company for the purpose of conducting, directly or indirectly, any gas utility, gas appliance merchandising and jobbing, and transportation business, and to cease engaging, directly or indirectly, in any gas utility, gas appliance merchandising and jobbing, and transportation business now engaged in by it, directly or indirectly, through the said Virginia Electric and Power Company; and

3. That El Paso Electric Company (Delaware), a registered public utility holding company, shall sever its relationship with El Paso and Juarez Traction Company by disposing or causing the disposition, in any appropriate manner not in contravention of the applicable provisions of the said act or the rules, regulations, or orders promulgated thereunder, of its direct and indirect ownership, control, and holding of securities issued and properties owned, controlled, or operated by the said El Paso and Juarez Traction Company; and

4. That the said El Paso Electric Company (Delaware) shall cease to own or operate, directly or indirectly, any property or facilities now owned or operated by it through El Paso Electric Company (Texas) for the purpose of conducting, directly or indirectly, any transportation or toll

bridge business, and to cease engaging, directly or indirectly, in any transportation and toll bridge business now engaged in by it, directly or indirectly, through the said El Paso Electric Company (Texas); and

Engineers Public Service Company, a registered public utility holding company, controlling more than one single integrated public utility system, although heretofore afforded opportunity to indicate its choice of the single integrated system it desires to retain as its principal system, having failed to avail itself of such opportunity, and the Commission desiring nevertheless that further opportunity be afforded said respondent to indicate its views with respect to its choice of the principal system;

It is *further ordered* that notwithstanding the provisions of Rule XII (d) of the Commission's Rules of Practice Engineers Public Service Company may, within fifteen days of the date hereof, petition for leave to retain as its principal system the electric utility system of Gulf States Utilities Company;

Provided, however, that the Commission reserves the right to grant, deny, or dispose of any such petition according to the merits of the grounds urged in support thereof, and to take such other action with respect thereto as may appear to the Commission to be appropriate.

Issue having arisen in this proceeding as to the permissibility of retention of the Gulf States Utilities Company's electric utility properties located in Jasper, Texas; and

The Commission deeming it necessary and appropriate that the record

RE ENGINEERS PUBLIC SERVICE CO.

be reopened and that additional opportunity be afforded for the presentation of further relevant evidence bearing on such questions;

It is *ordered* that, at such hour and place and before such trial examiner as the Commission shall by further notice and order designate, additional opportunity shall be afforded upon application by Gulf States Utilities Company or Engineers Public Service Company for the presentation of further relevant evidence bearing upon the question whether the said electric utility properties located in Jasper, Texas, may be retained under Clauses (A) and (C) of § 11(b)(1) of the act as systems additional to the integrated electric utility system of Gulf States Utilities Company.

It is provided, with respect to our findings, opinion, and order herein, in their entirety, and with respect to the

entry, publication, and service thereof that they shall be without prejudice to the right of the Commission to enter such other and further appropriate orders from time to time as the Commission may deem necessary to secure compliance by the respondents with the provisions of the act and the pertinent rules and regulations thereunder, the findings and opinion in this proceeding, and the provisions of this order; and

It is further provided that jurisdiction is reserved to the Commission, notwithstanding this order, or its entry, publication, and service, to conduct such investigations, hearings, or other proceedings involving any or all of the respondents herein and to make such orders as it shall deem necessary or appropriate under § 11(b)(2) or any other provision of the Public Utility Holding Company Act of 1935.

MONTANA BOARD OF RAILROAD COMMISSIONERS

Re Butte City Lines, Incorporated

[Docket No. 3402, Report and Order No. 1800.]

Return, § 99 — Transportation company.

1. A return on the property invested by a transportation company amounting to 3.95 per cent is not a just and reasonable return, p. 128.

Return, § 99 — Transportation company.

2. A rate of return of 6 per cent annually on the net property value of a transportation company, used and useful in its business, is a just and reasonable return, p. 128.

Rates, § 319.1 — Transportation company — Concessions to students.

3. Reduced rates for students attending high schools and business college, upon presentation of an identification card, were approved, p. 128.

[September 18, 1942.]

APPPLICATION for authority to increase token fares and to allow students to ride for reduced fares during certain hours; granted in part.

MONTANA BOARD OF RAILROAD COMMISSIONERS

APPEARANCES: Corette & Corette, Attorneys, Butte, John E. Corette and Robert D. Corette, appearing, representing Butte City Lines, Inc.; Phil O'Donnell, W. H. Maloney, and Arnold Olson, representing protestants; Enor K. Matson, Counsel, for the Board.

Before: Horace F. Casey, Commissioner, Paul T. Smith, Commissioner, and Austin B. Middleton, Chairman.

By the BOARD: On March 31, 1942, Butte City Lines, Inc., herein-after referred to as the company, filed its application for authority to increase its present token fare of $6\frac{1}{4}$ cents each, or 4 tokens for 25 cents, to $8\frac{1}{2}$ cents each, or 3 tokens for 25 cents, and to allow students over the age of twelve years of the Butte High School, Butte Business College, Girls' Central High School, and Boys' Christian Brothers High School, upon their presentation of an identification card as to the attendance at any of the schools, to ride for a 5-cent fare between the hours of 7:30 A. M. and 4 P. M. on all school days, and to allow the Butte Business College students, in addition to riding for a 5-cent fare between 7:30 A. M. and 4 P. M., to ride for a 5-cent fare between 6 P. M. and 9:30 P. M. on all school days. Hearing was held at Butte, Montana, on April 16 and 17, 1942.

In accordance with the reservation at the close of the hearing the Board reopened the matter for further hearing on August 5, 1942, at Butte, Montana, for the purpose of receiving the report of the auditor of the Board of Railroad Commissioners, such report

being offered and received in evidence, marked Exhibit A.

On October 6, 1941, the company filed with this Board an application for authority to increase its token fares in a similar amount. This application did not include the provision of reduced fares to students. After hearing, this application was denied. From the proof then offered the Board found that the rate of return for the first ten months of the year 1941 on the net value of the tangible property, used and useful by the company in its business, was 1.63 per cent. Although this return was not a just and reasonable return on the said property of the company, the Board concluded the period was too short to justify a finding that an increase in rates was necessary, in view of the previous rate of return.

On the proof now presented the Board is of the opinion that the request of the company for authority to increase the present token fare of $6\frac{1}{4}$ cents each, or 4 tokens for 25 cents, to $8\frac{1}{2}$ cents each, or 3 tokens for 25 cents, is not justified, and application for such increase should be denied. On the evidence presented the net property value of the company for the year ending December 31, 1941, was \$100,703.40 after deducting depreciation amounting to \$133,337.49 from the original cost of the property amounting to \$234,040.89. The total income for this period was \$201,931.46, while the total operating expenses were \$197,978.78, leaving a net operating revenue of \$3,952.68. Based on the above figures, the rate of return earned by the company for the year 1941 was 3.95 per cent.

RE BUTTE CITY LINES, INC.

Effective April 20, 1942, there were wage increases of 9 cents per hour for drivers and 12 cents per day for washers. Two additional drivers were put on at this time. The total cost to the company for this increase in wages and employment of additional drivers will be \$14,027.52 annually. In April, 1942, the company purchased and put into operation ten new busses at a cost of \$47,227.69. The allowable depreciation on these new busses is \$562.22 monthly for seven years or \$6,746.64 annually. The increase in wages plus the added depreciation would amount to \$20,774.16 annually. The evidence also discloses that there has been a material increase in the cost of all of the parts and materials required by the company.

The number of token fares received during the year 1941 was 2,814,739. If the token fares should be increased from $6\frac{1}{4}$ cents to 7 cents, the increase in revenue, assuming the same number of token fares, would be \$21,110.54 annually, a figure practically offset by the increase in costs because of wage increases, added depreciation hereinbefore mentioned, and increase in cost of materials.

There is also a probability that the earnings of the company might be reduced on account of the reduced fares for students. Based on these calculations it would seem that while the application of the company for an increase from $6\frac{1}{4}$ cents to $8\frac{1}{2}$ cents per token should be denied, some slight increase should be made in order to take care of the increase in wages and depreciation effective since April 20, 1942.

While the proof disclosed that the

company made a reasonable return on its investment for the first four months of the year 1942, the proof also showed beyond a doubt that a considerable part of the increase was due to abnormal weather conditions and an unusually severe winter, which extended well into this period. Based on previous returns, it would not be reasonable to assume that the earnings of the company would be similar for the rest of the year. In fact, as disclosed from the proof offered, the earnings of the company invariably have fallen off during the summer months. Taking into consideration all of the factors so far as known, it would seem that a correction to the extent above indicated is necessary to enable the company to receive a just and reasonable return on its property invested, particularly in view of the low earnings for the year 1941.

Findings of Fact

On the evidence presented the Board now finds:

1. Not sufficient evidence has been presented to warrant a finding that a just and reasonable return to the company on the net property value of the company, used and useful in its business, requires an increase of its present token fare of $6\frac{1}{4}$ cents each, or 4 tokens for 25 cents, to $8\frac{1}{2}$ cents each, or 3 tokens for 25 cents.

2. Such increase, if granted, would provide more than a just and reasonable return on such property.

3. The net property value of the company, used and useful in its business, ending December 31, 1941, was \$100,703.40.

4. The net operating revenue for

MONTANA BOARD OF RAILROAD COMMISSIONERS

the year ending December 31, 1941, was \$3,952.68.

[1] 5. The rate of return on the property invested by the company for such period was 3.95 per cent, which is not a just and reasonable return on the said property.

6. The operating cost of the company was increased effective April 20, 1942, by wage increases amounting to \$14,027.52 annually.

7. In April, 1942, the company purchased and put into operation ten new busses at a cost of \$47,227.69.

8. The allowable and reasonable depreciation on such new busses is \$6,746.64 annually.

9. The cost of materials used by the company including repair parts and other materials, has materially increased since the evidence was presented in Docket No. 3395, upon which Report and Order No. 1784 was made by this Board on January 19, 1942.

10. An increase in the token fares from $6\frac{1}{4}$ cents to 7 cents would increase the revenue of the company \$21,110.54 annually.

11. Such increase in revenue would be offset by the annual increase in wages, added depreciation costs, increased costs of materials of all kinds used by the company and reduced fares to students.

[2] 12. An increase in the token

fares from $6\frac{1}{4}$ cents each to 7 cents each is necessary in order to provide a rate of return of 6 per cent annually on the net property value of the company, used and useful in its business, which is a just and reasonable return thereon.

Conclusions of Law

The Board concludes:

That the application of the Butte City Lines, Inc., for authority to increase its present token fares of $6\frac{1}{4}$ cents, or 4 tokens for 25 cents, to $8\frac{1}{4}$ cents, or 3 tokens for 25 cents, should be denied except that an increase from $6\frac{1}{4}$ cents to 7 cents for each token should be allowed, and the following fares should be allowed for students, to wit:

[3] Students over the age of twelve years of Butte High School, Butte Business College, Girls' Central High School, and Boys' Christian Brothers High School, upon their presentation of an identification card as to the attendance at any of the schools, to ride for a 5-cent fare between the hours of 7:30 A.M. and 4 P.M. on all school days, and to allow the Butte Business College students, in addition to riding for a 5-cent fare between the hours of 7:30 A.M. and 4 P.M., to ride for a 5-cent fare between 6 P.M. and 9:30 P.M. on all school days.



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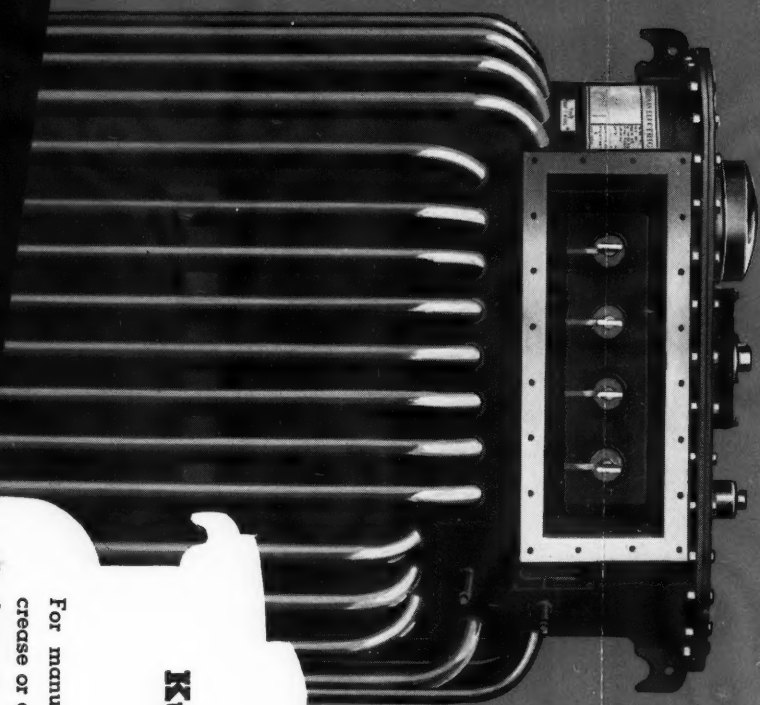
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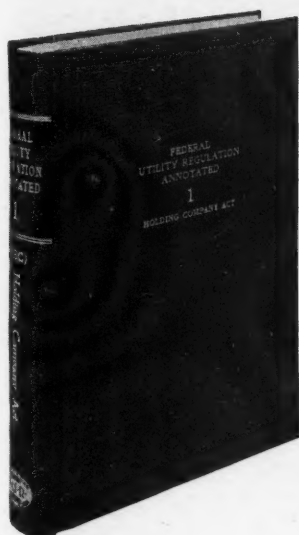


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Equipment Notes

New Pump Tank Fire Extinguisher For Use on Incendiary Bomb Fires

In conformance with the emergency requirements of the United States Government, the American-LaFrance-Foamite Corp. has designed a new pump tank with the amount of critical materials in its manufacture reduced to a minimum.

This new pump tank produces a straight stream and not a spray. This is in compliance with the latest requirement of the Office of Civilian Defense for controlling magnesium type incendiaries.

The new pump tank is made in 5 gal. and 2½ gal. sizes. It has an over-sized air chamber assuring minimum pulsation, a steady pressure and a more constant stream. It has a range of 30 to 40 ft. It is a self-contained unit and can be readily transported to points difficult of access. It is equipped with a standard 26 in. hose and its interior has a corrosion-resisting coating.

Both sizes are approved by the Underwriters' Laboratories with a Class A-1 rating, under the Emergency Alternate Specifications.

Forced-Convection Heaters

Forced-convection heaters are materially contributing this winter to the health, comfort and efficiency of engineers in the cabs of electric locomotives, guards in towers, and watchmen's houses around industrial plants. The heaters are also being increasingly used in shipyards, hangars, substations, warehouses, crane cabs, and similar out-of-the-way places, the General Electric Company reports.

Controlled automatically, and rated from 2 to 15 kw. G-E forced-convection heaters are

available in the suspension type for wall and ceiling mounting. The portable type, intended primarily for floor mounting, is readily adaptable for either wall or ceiling use. The heaters are sturdy, economical in operation, and easily and quickly installed, since it is only necessary to connect them to the nearest outlet.

Skin Creams and Lotions for Protection Against Industrial Dermatitis

An announcement of interest to industrial medical directors, safety engineers, and plant executives, of M. S. A. Fend industrial skin creams and lotions for barrier protection of the worker's skin against industrial dermatitis is made by Mine Safety Appliance Company, Pittsburgh, Pa., exclusive Fend distributor. A 16-page bulletin on the subject has been prepared by the company.

Fend creams and lotions are stated to provide a protective barrier on the skin against many specific hazards in industry. Offering no interference with the normal action of the skin glands, the creams protect and are emollient to the skin; are readily removed with mild soap and warm water.

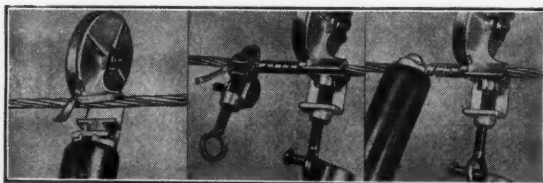
Each of the six different types of Fend products provides protection against a number of specific skin hazards. These types are the result of intensive research and are declared to mark a definite advance in modern skin protection.

Electric Watchman Protects Generators

An automatic electric watchman the size of a large box camera, which jots down a warning in red ink when it detects vibrations that might eventually cripple a power-producing machine, is announced by Westinghouse Elec-

Armor Tape Winder Saves Service Interruptions

The A. B. Chance Company recently designed a new Armor Tape Winder for wrapping Armor tape on aluminum or copper con-



ductors without interrupting service. This tool will apply tapes to conductors up to 4/0. If desired a second tape may be wound over the first on No. 6 up to No. 1 conductors.

Interchangeable magazines are available for tapes ¼ in., 5/16 in., ¾ in., and 1 in. wide. Each magazine will hold up to 10 ft. of tape. Operation of the tool is a simple method of attaching and turning the tape winder around the conductor with a disconnect stick, tie stick, or similar insulated tool. For further information about this tape winder write the A. B. Chance Company, Centralia, Missouri.

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Equipment Notes (Cont'd)

tric & Mfg. Co. Harry C. Werner, vibration expert at the Westinghouse Research Laboratories, devised the instrument—a midget-sized generator of electricity—to measure in thousandths of an inch the slightest tremors in the spinning shafts of turbo-generators. By discovering quivers in shafts turning at 3,600 revolutions per minute and recording a warning, the detector provides a perpetual diagnosis of giant power house machines producing electricity day and night for the nation's war plants and homes.

Mr. Werner also has designed an instrument to detect any axial or lengthwise displacement of the shaft relative to the stationary members. A turbo-generator is always designed to allow for internal relative expansion of the shaft in its housing since metal expands when heated and contracts when it cools. One of Mr. Werner's electrical detectors provides a record of any departure of the shaft from its basic position and also indicates significant changes in the necessary running clearances.

Manufacturers' Notes**I.B.M. Endicott Plant
Awarded Army-Navy "E"**

International Business Machines Corporation's Plant No. 1, at Endicott, N. Y., has been awarded the Army-Navy "E" Production Award "for great accomplishment in the production of war equipment."

At the "E" award ceremony, Thomas J. Watson, president, expressed the company's appreciation to its suppliers of equipment and materials for their cooperation in the war program.

**Thornton Tandem Official Completes
Civilian Orientation Course**

S. F. Baker has returned to his duties as vice president of the Thornton Tandem Company of Detroit, having completed the Civilian Orientation Course presented by the Command and General Staff School of the United States Army at Fort Leavenworth, Kansas. Mr. Baker, a World War I flyer, was one of a group of eighty-seven men selected by Lieut. General Brehon Somervell to participate in this condensed General Staff officer's course. This group was chosen as a cross section of all types of business and professions interested in war activities.

The purpose of the course is to familiarize this representative group of civilians, most of whom have had military experience, with the streamlined structure of the new Army, as

well as an over-all view of the tasks confronting the Army in the current war. It was purposed by the War Department, to create, in this manner, a group of informed citizenry who may act as a liaison between military and business groups for the purpose of facilitating co-operative efforts between industry and the country's military organizations.

Mr. Baker returned highly impressed with the necessity for a complete understanding by men in industry of the tremendous problems which face our Army. "This war," he says, "will be fought with the aid of God to a successful conclusion and will exact from us all, men and management of industry, civilians and non-defense business, a heavy cost over a period of several years. One could not attend this course without sensing the need for sacrificing many of the conveniences and comforts of our present every-day life."

Growth of Aluminum Production

With the \$250,000,000 expansion program of the Aluminum Company of America nearing completion and with other privately-owned and government-financed plants in operation, the United States produced during the year more than a billion pounds of aluminum, according to a recent statement by Roy A. Hunt, president. When the plants Alcoa is building for the Defense Plant Corporation are completed and the peak of 1943 production is reached, there will be a capacity in this country to make 2,100,000,000 pounds annually. This is 63 per cent more than the aluminum production of the whole world in 1938. Of this total, Alcoa is scheduled to produce a major portion in its own plants and those it will lease from the government.

R. D. Donaldson Joins Gibbs & Hill, Inc.

Roderick D. Donaldson, formerly vice president of the Utility Management Corporation, has become associated with Gibbs & Hill, Inc., consulting engineers, as head of a department to render advisory and supervisory services to operating utilities, it was announced recently by E. R. Hill, president.

Gibbs & Hill, Inc., whose present activities are concerned almost exclusively with engineering and construction work for the war effort, created the new department to meet a need resulting from the current trend toward decentralization in the utilities industry, the announcement stated.

Lengthening Truck Life

Suggestions for lengthening the life of the nation's vital and irreplaceable motor trucks and motor truck tires are offered by Walter F. Rockwell, president of The Timken-Detroit Axle Company, Detroit, Mich.

To those in charge of the vehicles and loading docks of industries, Mr. Rockwell suggested:

1. Make sure scrap is properly loaded, so that sharp pieces of metal won't fall out on the pavement. Metal is precious, and the trucks and buses and their tires that may be damaged by scrap are even more precious.

2. Recheck all routes being followed by com-

DICKE TOOL COMPANY

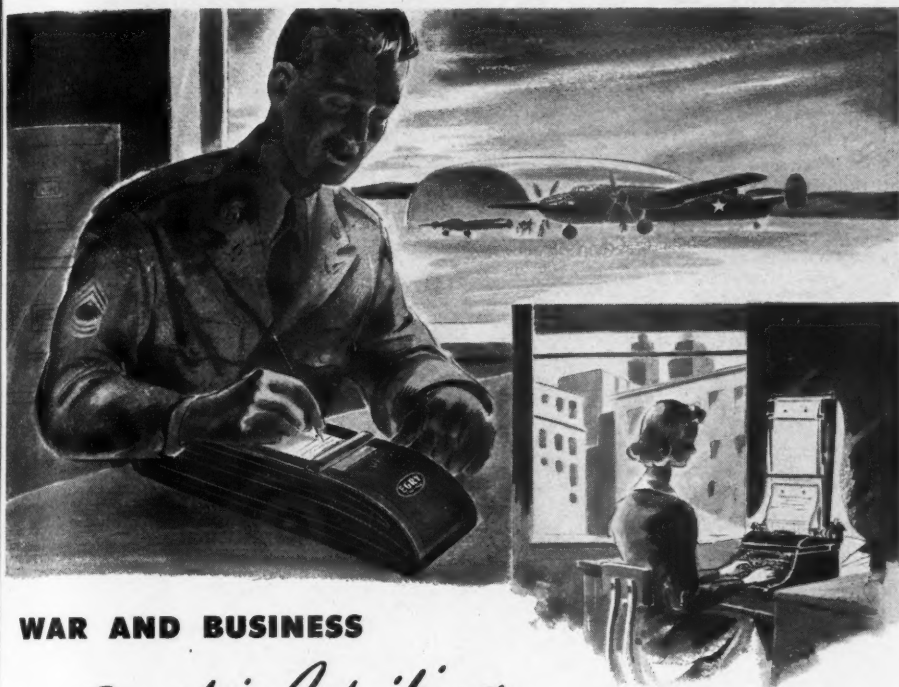
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Manufacturers' Notes (Cont'd)

pany trucks to make sure they are the shortest and smoothest available.

3. Make certain your vehicle maintenance methods meet wartime requirements, and don't overlook thorough axle maintenance as a way to reduce the number of breakdowns, costly replacements, and waste of vital metals.

4. Start vehicles earlier on their runs or relax delivery schedules a little to eliminate the sudden starts, quick stops, and fast, nervous driving of men working to close time limits. Then enforce company rules on careful, moderate driving methods if you want your vehicles to last.

5. Study ways and means of establishing an all-time record for safe driving. Every accident caused by speeding or negligence is sabotage of equipment of utmost importance to America's war effort. Safe driving rules must be enforced by the companies owning the vehicles as well as by authorized law enforcement agencies.

6. Never overload trucks.

7. Ask your drivers to turn in daily forms reporting on the mechanical condition of their trucks.

E. F. Coogan Appointed Vice President Autocar

Edward F. Coogan, sales manager since 1936 of The Autocar Company, motor truck manufacturers of Ardmore, Pa., has been appointed a vice president. As such, he will become more directly concerned with the company's expanding service requirements for military vehicles, in the manufacture of which the company's productive capacity is now totally engaged. He will, however, continue his former sales supervision of commercial business.

R & I E Appoints Sales Representative

W. J. Hugo has been appointed sales representative for the Railway and Industrial Engineering Company covering the north central states. Mr. Hugo, whose headquarters are in Minneapolis, Minnesota, has operated as a manufacturer's representative for twenty-two years and enjoys a wide acquaintance in that district.

Along with R&IE equipment, Mr. Hugo handles the sale of other allied equipment for several other manufacturers. He will cover the states of Minnesota, parts of Iowa, Illinois and Wisconsin, and the states of North and South Dakota.

Riley Moves Baltimore Office

Effective January 1, 1943, the Riley Stoker Corporation, manufacturers of fuel burning

and steam generating equipment, Worcester, Mass., moved the company's Baltimore office to 1147 Connecticut Ave., N. W., Washington, D. C.

Gregory Advanced by Thornton-Tandem

Bruce Gregory, formerly in charge of sales for Thornton Tandem Company, Detroit, has been appointed vice president in charge of sales and a member of the board.

Catalogs and Bulletins**Ernst Transformer Carriers**

An illustrated folder issued by the Ernst Carrier Sales Co., Buffalo, N. Y., describes the company's complete line of barrel, drum and transformer carriers.

The Model 1400 transformer carrier has a capacity of 1,400 lbs.; 4 wheels, 8 in. diameter; square base 32 in. inside. This model also is supplied with a special ratchet lift to raise transformer 14 in. from floor and has an extra heavy duty post.

"Pumps for the Purpose"

The Tuthill Pump Company, Chicago, has issued a general catalog "Pumps for the Purpose" covering its entire line of rotary pumps, including model L pump which is equipped with a mechanical seal to prevent leakage at the pump shaft, model C general purpose pump, model CK ball bearing pump, model M coolant pump, model RC and model RM automatic reversing pumps, series S and SA stripped model pumps and relief valves.

All of these pumps are of the rotary, internal gear, positive displacement type, designed primarily for handling lubricating oil or liquids with lubricating qualities of a non-corrosive nature.

G-E Opens Appliance Service Center in Atlanta

In line with General Electric Company's appliance service program intended to facilitate appliance repairs in all sections of the country, another major appliance service center has been opened in Atlanta, Ga.

The new center will serve the southeastern states. Similar centers have been in operation for some time in Boston and San Francisco. These centers are factory-operated by the company's appliance & merchandise department, Bridgeport, Conn.

Lightning Protective Equipment

Lightning protective equipment for A-C rotating machines and A-C side of rectifier equipments for protection against traveling-wave voltages due to lightning is described and illustrated in a 16-page booklet (GEA-1743E) recently published by the General Electric Company.

Specifications for Sump Pumps

Automatic electric sump pumps are described in a bulletin (AIA File No. 29-C-1) issued by the manufacturer, Penberthy Injector Company, Detroit, Mich.

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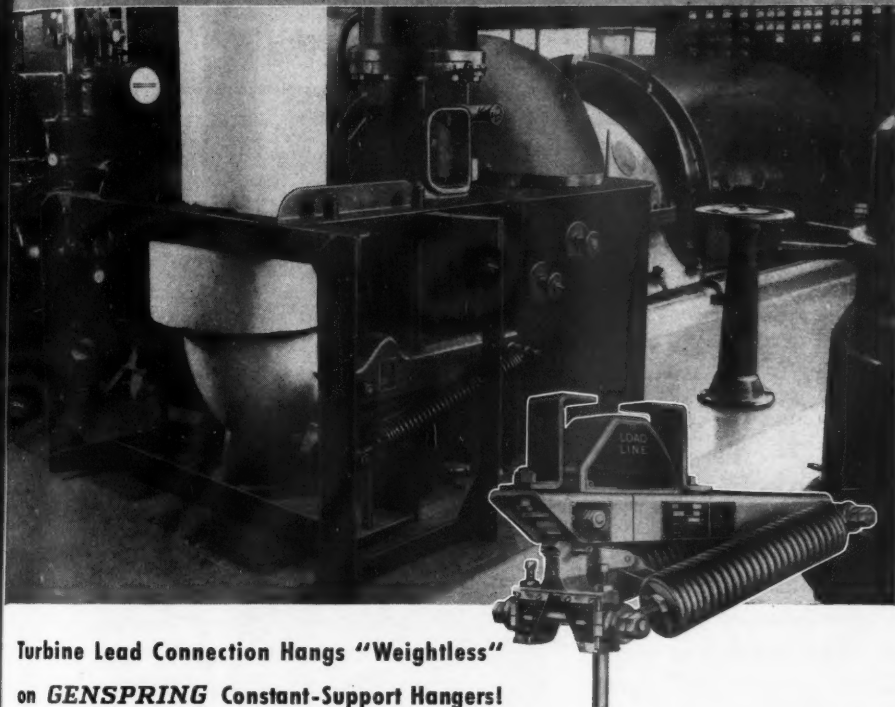


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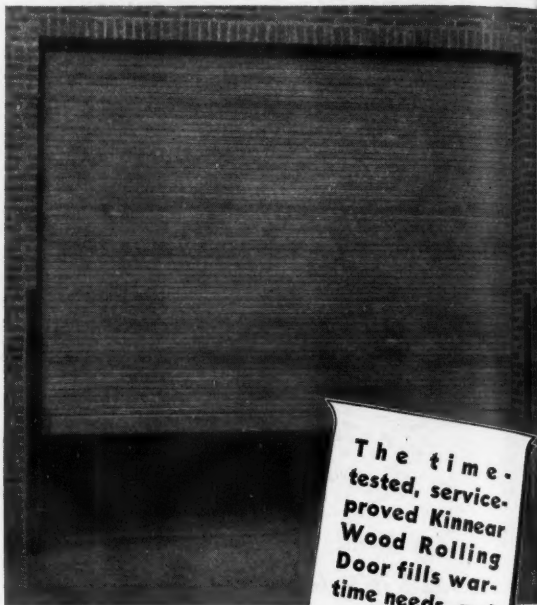
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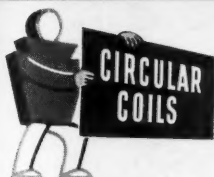
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Transformer Fundamentals

...that insure unfailing power supply to war industries.

The fundamental improvements outlined below are the result of Pennsylvania's continuous research and development to assure greater transformer reliability, lower operating costs and longer life! They are but a few of the many improvements to be found in Pennsylvania Transformers.

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... with Silver-to-Silver Contacts

Pennsylvania's straight line tap changer with its silver-to-silver contacts is capable of carrying heavy overloads without overheating and is able to withstand "dead" short circuits without detrimental effects.

Tests have been made to fully prove these characteristics, the tap changer being subjected to 100,000 full operations—more than would occur during the normal life of the transformer.



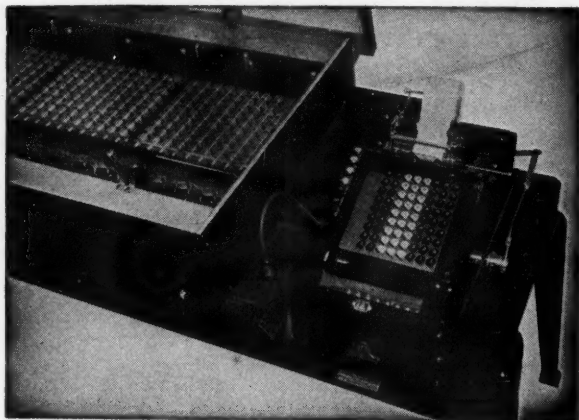
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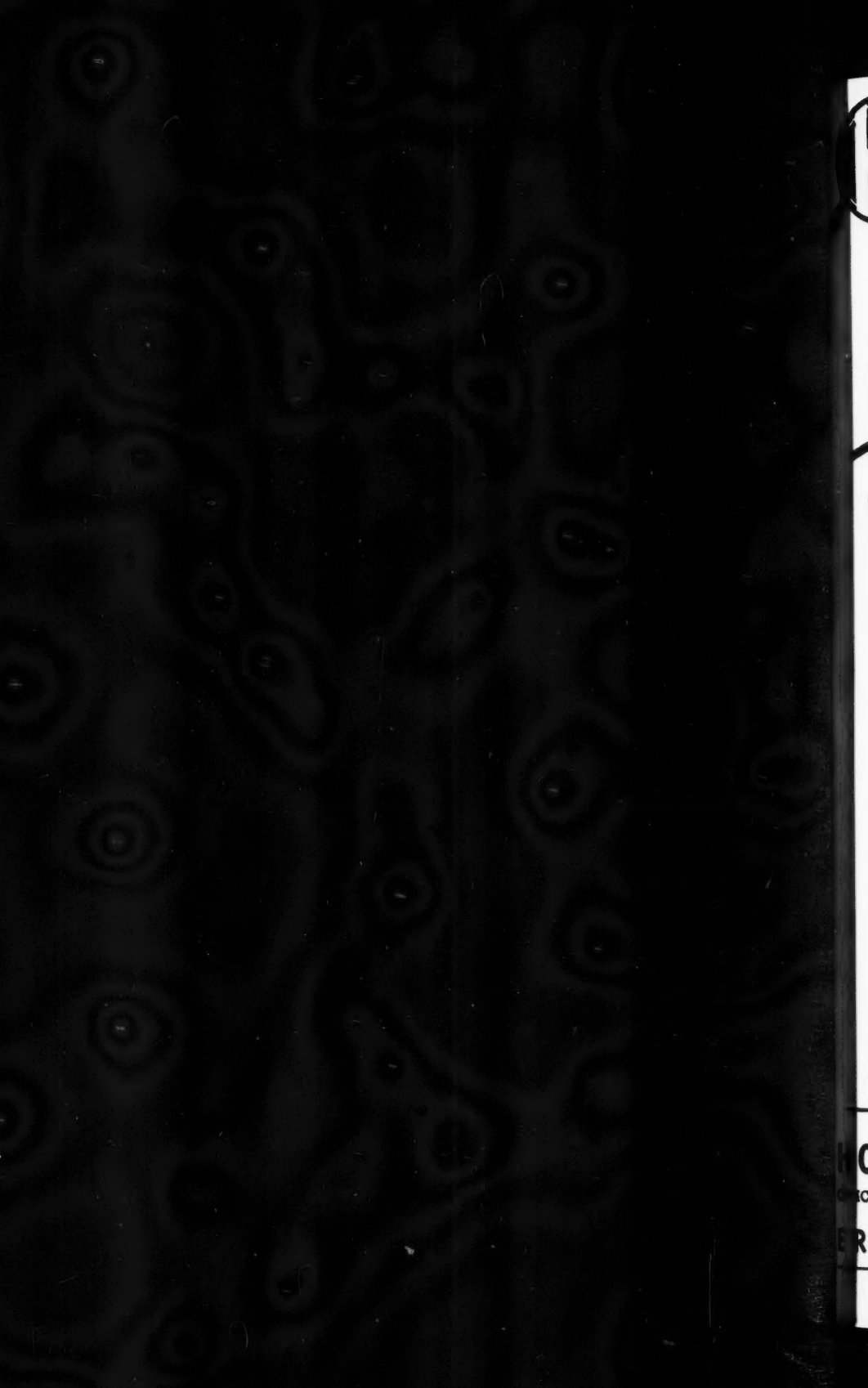
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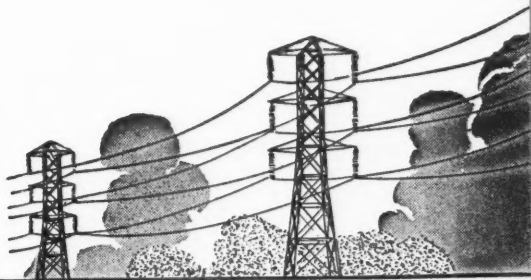
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